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Gly Leu Glu Phe Pro Asn Leu Pro Tyr Tyr Ile Asp Gly Asp Val Lys
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Leu Thr Gln Ser Met Ala Ile Ile Arg Tyr Ile Ala Asp Lys His Asn
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Met Leu Gly Gly Cys Pro Lys Glu Arg Ala Glu Ile Ser Met Leu Glu
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Gly Ala Val Leu Asp Ile Arg Tyr Gly Val Ser Arg Ile Ala Tyr Ser
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Lys Asp Phe Glu Thr Leu Lys Val Asp Phe Leu Ser Lys Leu Pro Glu
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Lys Leu Leu Ala Val Asn Asn Val Cys Leu Glu Glu Val Thr His Glu
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Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn Asp Thr Cys
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Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe Gln Ser Ile
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Glu Gly Gly Pro Ala Glu Ile Ala Gly Leu Gln Ile Gly Asp Lys Ile
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Met Gln Val Asn Gly Trp Asp Met Thr Met Val Thr His Asp Gln Ala
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Ser Ile Gly Gly Ile Asp Gln Asp Pro Ser Gln Asn Pro Phe Ser
Glu Asp Lys Thr Asp Lys Gly Ile Tyr Val Thr Arg Val Ser Glu Gly
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Gly Pro Ala Glu Ile Ala Gly Leu Gln Ile Gly Asp Lys Ile Met Gln
Val Asn Gly Trp Asp Met Thr Met Val Thr His Asp Gln Ala Arg Lys
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Lys Gly Ile Tyr Val Thr Arg Val Ser Glu Gly Gly Pro Ala Glu Ile
Ala Gly Leu Gln Ile Gly Asp Lys Ile Met Gln Val Asn Gly Trp Asp
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Met Thr Met Val Thr His Asp Gln Ala Arg Lys Arg Leu Thr Lys Arg
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Val Thr Ser Leu
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Pro Phe Leu Leu

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Asn Cys Lys Ser

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Ser Arg Gln His
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Gly Ala Cys Trp Leu Pro Arg Ile Ser Ser Met Ser Ser Leu Thr Gly
                                     10
Ile Met Arg Cys
           . 20
<210> 666
<211> 4
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 666
Ile Met Arg Cys
<210> 667
<211> 87
<212> PRT
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```
<220>
<223> Synthetic polymer
<400> 667
Arg Asp Met Ala Glu Ala His Lys Glu Ala Met Ser Arg Lys Leu Gly
                                    10
                 5
Gln Ser Glu Ser Gln Gly Pro Pro Arg Ala Phe Ala Lys Val Asn Ser
                                25
Ile Ser Pro Gly Ser Pro Ser Ile Ala Gly Leu Gln Val Asp Asp Glu
                            40
Ile Val Glu Phe Gly Ser Val Asn Thr Gln Asn Phe Gln Ser Leu His
Asn Ile Gly Ser Val Val Gln His Ser Glu Gly Ala Leu Ala Pro Thr
                   70
                                        75
Ile Leu Leu Ser Val Ser Met
               85
<210> 668
<211> 93
<212> PRT
<213> Artificial Sequence
<223> Synthetic polymer
<400> 668
Leu Arg Lys Glu Pro Glu Ile Ile Thr Val Thr Leu Lys Lys Gln Asn
                                    10
                - 5
Gly Met Gly Leu Ser Ile Val Ala Ala Lys Gly Ala Gly Gln Asp Lys
                                25
Leu Gly Ile Tyr Val Lys Ser Val Val Lys Gly Gly Ala Ala Asp Val
                            40
Asp Gly Arg Leu Ala Ala Gly Asp Gln Leu Leu Ser Val Asp Gly Arg
Ser Leu Val Gly Leu Ser Gln Glu Arg Ala Ala Glu Leu Met Thr Arg
                   70
Thr Ser Ser Val Val Thr Leu Glu Val Ala Lys Gln Gly
<210> 669
<211> 105
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 669
Leu Ile Arg Pro Ser Val Ile Ser Ile Ile Gly Leu Tyr Lys Glu Lys
                                    10
Gly Lys Gly Leu Gly Phe Ser Ile Ala Gly Gly Arg Asp Cys Ile Arg
                                25
Gly Gln Met Gly Ile Phe Val Lys Thr Ile Phe Pro Asn Gly Ser Ala
                            40
Ala Glu Asp Gly Arg Leu Lys Glu Gly Asp Glu Ile Leu Asp Val Asn
                                            60
Gly Ile Pro Ile Lys Gly Leu Thr Phe Gln Glu Ala Ile His Thr Phe
                    70
                                       75
Lys Gln Ile Arg Ser Gly Leu Phe Val Leu Thr Val Arg Thr Lys Leu
```

Val Ser Pro Ser Leu Thr Asn Ser Ser 100 105

<210> 670 <211> 132 <212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic polymer

<400> 670

Gly Ile Ser Ser Leu Gly Arg Lys Thr Pro Gly Pro Lys Asp Arg Ile 1 5 10 15 Val Met Glu Val Thr Leu Asn Lys Glu Pro Arg Val Gly Leu Gly Ile

val Met Glu val Thr Leu Ash Lys Glu Pro Arg val Gly Leu Gly Tle

20
25
30

Gly Ala Cys Cys Leu Ala Leu Glu Asn Ser Pro Pro Gly Ile Tyr Ile 35 40 45 His Ser Leu Ala Pro Gly Ser Val Ala Lys Met Glu Ser Asn Leu Ser

50 55 60 Arg Gly Asp Gln Ile Leu Glu Val Asn Ser Val Asn Val Arg His Ala

65 70 75 80 Ala Leu Ser Lys Val His Ala Ile Leu Ser Lys Cys Pro Pro Gly Pro

Val Arg Leu Val Ile Gly Arg His Pro Asn Pro Lys Val Ser Glu Gln
100 105 110

Glu Met Asp Glu Val Ile Ala Arg Ser Thr Tyr Gln Glu Ser Lys Glu 115 120 125

Ala Asn Ser Ser 130

<210> 671

<211> 105

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic polymer

<400> 671

Gln Ser Glu Asn Glu Glu Asp Val Cys Phe Ile Val Leu Asn Arg Lys 1 5 10 15

Glu Gly Ser Gly Leu Gly Phe Ser Val Ala Gly Gly Thr Asp Val Glu 20 25 30

Pro Lys Ser Ile Thr Val His Arg Val Phe Ser Gln Gly Ala Ala Ser 35 40 45

Gln Glu Gly Thr Met Asn Arg Gly Asp Phe Leu Leu Ser Val Asn Gly 50 60

Ala Ser Leu Ala Gly Leu Ala His Gly Asn Val Leu Lys Val Leu His 65 70 75 80

Gln Ala Gln Leu His Lys Asp Ala Leu Val Val Ile Lys Lys Gly Met 85 90 95

Asp Gln Pro Arg Pro Ser Asn Ser Ser 100 105

<210> 672

<211> 101

<212> PRT

```
<220>
<223> Synthetic polymer
<400> 672
Leu Gly Arg Ser Val Ala Val His Asp Ala Leu Cys Val Glu Val Leu
Lys Thr Ser Ala Gly Leu Gly Leu Ser Leu Asp Gly Gly Lys Ser Ser
                                25
Val Thr Gly Asp Gly Pro Leu Val Ile Lys Arg Val Tyr Lys Gly Gly
                            40
Ala Ala Glu Gln Ala Gly Ile Ile Glu Ala Gly Asp Glu Ile Leu Ala
                        55
Ile Asn Gly Lys Pro Leu Val Gly Leu Met His Phe Asp Ala Trp Asn
                    70
                                        75
Ile Met Lys Ser Val Pro Glu Gly Pro Val Gln Leu Leu Ile Arg Lys
                85
                                    90
His Arg Asn Ser Ser
            100
<210> 673
<211> 74
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 673
Gln Thr Val Ile Leu Pro Gly Pro Ala Ala Trp Gly Phe Arg Leu Ser
                                    10
Gly Gly Ile Asp Phe Asn Gln Pro Leu Val Ile Thr Arg Ile Thr Pro
                                25
Gly Ser Lys Ala Ala Ala Ala Asn Leu Cys Pro Gly Asp Val Ile Leu
Ala Ile Asp Gly Phe Gly Thr Glu Ser Met Thr His Ala Asp Gly Gln
                        55
Asp Arg Ile Lys Ala Ala Glu Phe Ile Val
<210> 674
<211> 85
<212> PRT
<213> Artificial Sequence
<223> Synthetic polymer
<400> 674
Ile Leu Val Glu Val Gln Leu Ser Gly Gly Ala Pro Trp Gly Phe Thr
                                    10
Leu Lys Gly Gly Arg Glu His Gly Glu Pro Leu Val Ile Thr Lys Ile
                                25
Glu Glu Gly Ser Lys Ala Ala Ala Val Asp Lys Leu Leu Ala Gly Asp
                            40
Glu Ile Val Gly Ile Asn Asp Ile Gly Leu Ser Gly Phe Arg Gln Glu
                        55
Ala Ile Cys Leu Val Lys Gly Ser His Lys Thr Leu Lys Leu Val Val
                    70
                                        75
```

Lys Arg Asn Ser Ser

85

```
<220>
 <223> Synthetic polymer
 <400> 675
 Arg Glu Lys Pro Leu Phe Thr Arg Asp Ala Ser Gln Leu Lys Gly Thr
                                     10
 Phe Leu Ser Thr Thr Leu Lys Lys Ser Asn Met Gly Phe Gly Phe Thr
                                 25
 Ile Ile Gly Gly Asp Glu Pro Asp Glu Phe Leu Gln Val Lys Ser Val
                             40
                                                 45
 Ile Pro Asp Gly Pro Ala Ala Gln Asp Gly Lys Met Glu Thr Gly Asp
 Val Ile Val Tyr Ile Asn Glu Val Cys Val Leu Gly His Thr His Ala
                                         75
                     70
 Asp Val Val Lys Leu Phe Gln Ser Val Pro Ile Gly Gln Ser Val Asn
                 85
Leu Val Leu Cys Arg Gly Tyr Pro
             100
 <210> 676
 <211> 91
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> Synthetic polymer
 <400> 676
 Leu Ser Gly Ala Thr Gln Ala Glu Leu Met Thr Leu Thr Ile Val Lys
                                     10
 Gly Ala Gln Gly Phe Gly Phe Thr Ile Ala Asp Ser Pro Thr Gly Gln
                                 25
 Arg Val Lys Gln Ile Leu Asp Ile Gln Gly Cys Pro Gly Leu Cys Glu
                             40
 Gly Asp Leu Ile Val Glu Ile Asn Gln Gln Asn Val Gln Asn Leu Ser
                         55
 His Thr Glu Val Val Asp Ile Leu Lys Asp Cys Pro Ile Gly Ser Glu
                     7.0
                                         75
 Thr Ser Leu Ile Ile His Arg Gly Gly Phe Phe
                 85
 <210> 677
 <211> 93
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> Synthetic polymer
 <400> 677
 His Tyr Lys Glu Leu Asp Val His Leu Arg Arg Met Glu Ser Gly Phe
                                     10
 Gly Phe Arg Ile Leu Gly Gly Asp Glu Pro Gly Gln Pro Ile Leu Ile
             20
                                 25
                                      154
```

<210> 67.5 <211> 104 <212> PRT

Gly Ala Val Ile Ala Met Gly Ser Ala Asp Arg Asp Gly Arg Leu His 35

Pro Gly Asp Glu Leu Val Tyr Val Asp Gly Ile Pro Val Ala Gly Lys 50

Thr His Arg Tyr Val Ile Asp Leu Met His His Ala Ala Arg Asn Gly 65

Gln Val Asn Leu Thr Val Arg Arg Lys Val Leu Cys Gly 85

85

<210> 678 <211> 106 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer

<400> 678 Glu Gly Arg Gly Ile Ser Ser His Ser Leu Gln Thr Ser Asp Ala Val

1 5 10 15

Ile His Arg Lys Glu Asn Glu Gly Phe Gly Phe Val Ile Ile Ser Ser 20 25 30

Leu Asn Arg Pro Glu Ser Gly Ser Thr Ile Thr Val Pro His Lys Ile

35 · 40 · 45
Gly Arg Ile Ile Asp Gly Ser Pro Ala Asp Arg Cys Ala Lys Leu Lys
50 · 55 · 60

Val Gly Asp Arg Ile Leu Ala Val Asn Gly Gln Ser Ile Ile Asn Met 65 70 75 80

Pro His Ala Asp Ile Val Lys Leu Ile Lys Asp Ala Gly Leu Ser Val

Thr Leu Arg Ile Ile Pro Gln Glu Glu Leu
100 105

8.5

<210> 679 <211> 98 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer

50 55 60

Asn Gly Glu Ser Thr Arg Asp Met Thr His Ala Arg Ala Ile Glu Leu
65 70 75 80

Ile Lys Ser Gly Gly Arg Arg Val Arg Leu Leu Leu Lys Arg Gly Thr

Gly Gln

<210> 680 <211> 90 <212> PRT

```
<220>
<223> Synthetic polymer
<400> 680
His Glu Ser Val Ile Gly Arg Asn Pro Glu Gly Gln Leu Gly Phe Glu
Leu Lys Gly Gly Ala Glu Asn Gly Gln Phe Pro Tyr Leu Gly Glu Val
                                25
Lys Pro Gly Lys Val Ala Tyr Glu Ser Gly Ser Lys Leu Val Ser Glu
                           40
Glu Leu Leu Glu Val Asn Glu Thr Pro Val Ala Gly Leu Thr Ile
Arg Asp Val Leu Ala Val Ile Lys His Cys Lys Asp Pro Leu Arg Leu
                   7.0
Lys Cys Val Lys Gln Gly Gly Ile His Arg
              85
<210> 681
<211> 126
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 681
Asn Leu Met Phe Arg Lys Phe Ser Leu Glu Arg Pro Phe Arg Pro Ser
                                   10
                5
Val Thr Ser Val Gly His Val Arg Gly Pro Gly Pro Ser Val Gln His
                             . 25
Thr Thr Leu Asn Gly Asp Ser Leu Thr Ser Gln Leu Thr Leu Leu Gly
                            40
Gly Asn Ala Arg Gly Ser Phe Val His Ser Val Lys Pro Gly Ser Leu
Ala Glu Lys Ala Gly Leu Arg Glu Gly His Gln Leu Leu Leu Glu
                                       75
                   70
Gly Cys Ile Arg Gly Glu Arg Gln Ser Val Pro Leu Asp Thr Cys Thr
                                   90
Lys Glu Glu Ala His Trp Thr Ile Gln Arg Cys Ser Gly Pro Val Thr
           100
                               105
Leu His Tyr Lys Val Asn His Glu Gly Tyr Arg Lys Leu Val
       115
<210> 682
<211> 100
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 682
Ile Leu Ser Gln Val Thr Met Leu Ala Phe Gln Gly Asp Ala Leu Leu
Glu Gln Ile Ser Val Ile Gly Gly Asn Leu Thr Gly Ile Phe Ile His
           20
                               25
Arg Val Thr Pro Gly Ser Ala Ala Asp Gln Met Ala Leu Arg Pro Gly
Thr Gln Ile Val Met Val Asp Tyr Glu Ala Ser Glu Pro Leu Phe Lys
```

```
55
    50
Ala Val Leu Glu Asp Thr Thr Leu Glu Glu Ala Val Gly Leu Leu Arg
                    70
                                        75
Arg Val Asp Gly Phe Cys Cys Leu Ser Val Lys Val Asn Thr Asp Gly
                                    90
Tyr Lys Arg Leu
            100
<210> 683
<211> 90
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 683
Thr Arg Val Arg Leu Val Gln Phe Gln Lys Asn Thr Asp Glu Pro Met
Gly Ile Thr Leu Lys Met Asn Glu Leu Asn His Cys Ile Val Ala Arg
Ile Met His Gly Gly Met Ile His Arg Gln Gly Thr Leu His Val Gly
                            40
Asp Glu Ile Arg Glu Ile Asn Gly Ile Ser Val Ala Asn Gln Thr Val
                        55
Glu Gln Leu Gln Lys Met Leu Arg Glu Met Arg Gly Ser Ile Thr Phe
                   70
                                        75
Lys Ile Val Pro Ser Tyr Arg Thr Gln Ser
                85
<210> 684
<211> 88
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 684
Leu Glu Gln Lys Ala Val Leu Glu Gln Val Gln Leu Asp Ser Pro Leu
                                    10
Gly Leu Glu Ile His Thr Thr Ser Asn Cys Gln His Phe Val Ser Gln
                                25
Val Asp Thr Gln Val Pro Thr Asp Ser Arg Leu Gln Ile Gln Pro Gly
                            40
Asp Glu Val Val Gln Ile Asn Glu Gln Val Val Gly Trp Pro Arg
                        55
Lys Asn Met Val Arg Glu Leu Leu Arg Glu Pro Ala Gly Leu Ser Leu
Val Leu Lys Lys Ile Pro Ile Pro
                85
<210> 685
<211> 92
<212> PRT
<213> Artificial Sequence
```

<223> Synthetic polymer

```
<400> 685
Gln Arg Lys Leu Val Thr Val Glu Lys Gln Asp Asn Glu Thr Phe Gly
                                    10
Phe Glu Ile Gln Ser Tyr Arg Pro Gln Asn Gln Asn Ala Cys Ser Ser
                                25
Glu Met Phe Thr Leu Ile Cys Lys Ile Gln Glu Asp Ser Pro Ala His
Cys Ala Gly Leu Gln Ala Gly Asp Val Leu Ala Asn Ile Asn Gly Val
Ser Thr Glu Gly Phe Thr Tyr Lys Gln Val Val Asp Leu Ile Arg Ser
Ser Gly Asn Leu Leu Thr Ile Glu Thr Leu Asn Gly
                85
<210> 686
<211> 109
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 686
Arg Cys Leu Ile Gln Thr Lys Gly Gln Arg Ser Met Asp Gly Tyr Pro
Glu Gln Phe Cys Val Arg Ile Glu Lys Asn Pro Gly Leu Gly Phe Ser
                                25
Ile Ser Gly Gly Ile Ser Gly Gln Gly Asn Pro Phe Lys Pro Ser Asp
                           40
Lys Gly Ile Phe Val Thr Arg Val Gln Pro Asp Gly Pro Ala Ser Asn
                       55
                                            60
Leu Leu Gln Pro Gly Asp Lys Ile Leu Gln Ala Asn Gly His Ser Phe
                    70
Val His Met Glu His Glu Lys Ala Val Leu Leu Leu Lys Ser Phe Gln
Asn Thr Val Asp Leu Val Ile Gln Arg Glu Leu Thr Val
           100
<210> 687
<211> 101
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 687
Ile Gln Val Asn Gly Thr Asp Ala Asp Tyr Glu Tyr Glu Glu Ile Thr
                                    10
Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe Ser Ile Ala Gly Gly Thr
Asp Asn Pro His Ile Gly Asp Asp Ser Ser Ile Phe Ile Thr Lys Ile
                            40
Ile Thr Gly Gly Ala Ala Ala Gln Asp Gly Arg Leu Arg Val Asn Asp
Cys Ile Leu Gln Val Asn Glu Val Asp Val Arg Asp Val Thr His Ser
                   70
                                        75
Lys Ala Val Glu Ala Leu Lys Glu Ala Gly Ser Ile Val Arg Leu Tyr
Val Lys Arg Arg Asn
            100
```

```
<210> 688
<211> 95
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 688
Ile Gln Leu Ile Lys Gly Pro Lys Gly Leu Gly Phe Ser Ile Ala Gly
                                    10
Gly Val Gly Asn Gln His Ile Pro Gly Asp Asn Ser Ile Tyr Val Thr
                                25
Lys Ile Ile Glu Gly Gly Ala Ala His Lys Asp Gly Lys Leu Gln Ile
                           40
                                                45
Gly Asp Lys Leu Leu Ala Val Asn Asn Val Cys Leu Glu Glu Val Thr
                        55
His Glu Glu Ala Val Thr Ala Leu Lys Asn Thr Ser Asp Phe Val Tyr
                                    . 75
Leu Lys Val Ala Lys Pro Thr Ser Met Tyr Met Asn Asp Gly Asn
<210> 689
<211> 85
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 689
Ile Leu His Arg Gly Ser Thr Gly Leu Gly Phe Asn Ile Val Gly Gly
Glu Asp Gly Glu Gly Ile Phe Ile Ser Phe Ile Leu Ala Gly Gly Pro
                                25
Ala Asp Leu Ser Gly Glu Leu Arg Lys Gly Asp Arg Ile Ile Ser Val
Asn Ser Val Asp Leu Arg Ala Ala Ser His Glu Gln Ala Ala Ala Ala
                        55
Leu Lys Asn Ala Gly Gln Ala Val Thr Ile Val Ala Gln Tyr Arg Pro
Glu Glu Tyr Ser Arg
<210> 690
<211> 101
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 690
Ile Ser Tyr Val Asn Gly Thr Glu Ile Glu Tyr Glu Phe Glu Glu Ile
                                    10
Thr Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe Ser Ile Ala Gly Gly
                                25
Thr Asp Asn Pro His Ile Gly Asp Pro Gly Ile Phe Ile Thr Lys
                            40
        35
```

```
Ile Ile Pro Gly Gly Ala Ala Ala Glu Asp Gly Arg Leu Arg Val Asn
                        55
Asp Cys Ile Leu Arg Val Asn Glu Val Asp Val Ser Glu Val Ser His
                    70
                                        75
Ser Lys Ala Val Glu Ala Leu Lys Glu Ala Gly Ser Ile Val Arg Leu
Tyr Val Arg Arg Arg
            100
<210> 691
<211> 94
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 691
Ile Ser Val Val Glu Ile Lys Leu Phe Lys Gly Pro Lys Gly Leu Gly
Phe Ser Ile Ala Gly Gly Val Gly Asn Gln His Ile Pro Gly Asp Asn
                                25
Ser Ile Tyr Val Thr Lys Ile Ile Asp Gly Gly Ala Ala Gln Lys Asp
Gly Arg Leu Gln Val Gly Asp Arg Leu Leu Met Val Asn Asn Tyr Ser
                        55
                                            60
Leu Glu Glu Val Thr His Glu Glu Ala Val Ala Ile Leu Lys Asn Thr
Ser Glu Val Val Tyr Leu Lys Val Gly Asn Pro Thr Thr Ile
               85
<210> 692
<211> 95
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 692
Ile Trp Ala Val Ser Leu Glu Gly Glu Pro Arg Lys Val Val Leu His
                                    10
Lys Gly Ser Thr Gly Leu Gly Phe Asn Ile Val Gly Gly Glu Asp Gly
                                25
Glu Gly Ile Phe Val Ser Phe Ile Leu Ala Gly Gly Pro Ala Asp Leu
Ser Gly Glu Leu Gln Arg Gly Asp Gln Ile Leu Ser Val Asn Gly Ile
                        55
Asp Leu Arg Gly Ala Ser His Glu Gln Ala Ala Ala Ala Leu Lys Gly
                    70 -
Ala Gly Gln Thr Val Thr Ile Ile Ala Gln Tyr Gln Pro Glu Asp
                85
<210> 693
<211> 102
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
```

```
<400> 693
Gly Ile Pro Tyr Val Glu Glu Pro Arg His Val Lys Val Gln Lys Gly
                                    10
Ser Glu Pro Leu Gly Ile Ser Ile Val Ser Gly Glu Lys Gly Gly Ile
Tyr Val Ser Lys Val Thr Val Gly Ser Ile Ala His Gln Ala Gly Leu
                            40
Glu Tyr Gly Asp Gln Leu Leu Glu Phe Asn Gly Ile Asn Leu Arg Ser
Ala Thr Glu Gln Gln Ala Arg Leu Ile Ile Gly Gln Gln Cys Asp Thr
                                        75
Ile Thr Ile Leu Ala Gln Tyr Asn Pro His Val His Gln Leu Arg Asn
                85
Ser Ser Glx Leu Thr Asp
           100
<210> 694
<211> 103
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 694
Gly Ile Leu Ala Gly Asp Ala Asn Lys Lys Thr Leu Glu Pro Arg Val
Val Phe Ile Lys Lys Ser Gln Leu Glu Leu Gly Val His Leu Cys Gly
                                25
Gly Asn Leu His Gly Val Phe Val Ala Glu Val Glu Asp Asp Ser Pro
                            40
Ala Lys Gly Pro Asp Gly Leu Val Pro Gly Asp Leu Ile Leu Glu Tyr
Gly Ser Leu Asp Val Arg Asn Lys Thr Val Glu Glu Val Tyr Val Glu
                                        75
Met Leu Lys Pro Arg Asp Gly Val Arg Leu Lys Val Gln Tyr Arg Pro
                                    90
               85
Glu Glu Phe Ile Val Thr Asp
           100
<210> 695
<211> 141
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 695
Pro Thr Ser Pro Glu Ile Gln Glu Leu Arg Gln Met Leu Gln Ala Pro
                                    10
His Phe Lys Ala Leu Leu Ser Ala His Asp Thr Ile Ala Gln Lys Asp
                                25
Phe Glu Pro Leu Pro Pro Leu Pro Asp Asn Ile Pro Glu Ser Glu
Glu Ala Met Arg Ile Val Cys Leu Val Lys Asn Gln Gln Pro Leu Gly
                        55
                                            60
Ala Thr Ile Lys Arg His Glu Met Thr Gly Asp Ile Leu Val Ala Arg
                                        75
Ile Ile His Gly Gly Leu Ala Glu Arg Ser Gly Leu Leu Tyr Ala Gly
```

```
90
                85
Asp Lys Leu Val Glu Val Asn Gly Val Ser Val Glu Gly Leu Asp Pro
                   105
Glu Gln Val Ile His Ile Leu Ala Met Ser Arg Gly Thr Ile Met Phe
                          120
       115
Lys Val Val Pro Val Ser Asp Pro Pro Val Asn Ser Ser
                        135
<210> 696
<211> 97
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 696
Pro Thr Ser Pro Glu Ile Gln Glu Leu Arg Gln Met Leu Gln Ala Pro
                                   10
His Phe Lys Gly Ala Thr Ile Lys Arg His Glu Met Thr Gly Asp Ile
Leu Val Ala Arg Ile Ile His Gly Gly Leu Ala Glu Arg Ser Gly Leu
                           40
Leu Tyr Ala Gly Asp Lys Leu Val Glu Val Asn Gly Val Ser Val Glu
                       55
Gly Leu Asp Pro Glu Gln Val Ile His Ile Leu Ala Met Ser Arg Gly
                   70
                                       75
Thr Ile Met Phe Lys Val Val Pro Val Ser Asp Pro Pro Val Asn Ser
Ser
<210> 697
<211> 93
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 697
Leu Asn Ile Val Thr Val Thr Leu Asn Met Glu Arg His His Phe Leu
                                   10
Gly Ile Ser Ile Val Gly Gln Ser Asn Asp Arg Gly Asp Gly Gly Ile
                               25
Tyr Ile Gly Ser Ile Met Lys Gly Gly Ala Val Ala Ala Asp Gly Arg
 . 35
                           40
Ile Glu Pro Gly Asp Met Leu Leu Gln Val Asn Asp Val Asn Phe Glu
                       55
Asn Met Ser Asn Asp Asp Ala Val Arg Val Leu Arg Glu Ile Val Ser
                   70
Gln Thr Gly Pro Ile Ser Leu Thr Val Ala Lys Cys Trp
<210> 698
<211> 100
<212> PRT
<213> Artificial Sequence
```

<400> 698 Leu Asn Ile Ile Thr Val Thr Leu Asn Met Glu Lys Tyr Asn Phe Leu Gly Ile Ser Ile Val Gly Gln Ser Asn Glu Arg Gly Asp Gly Ile Tyr Ile Gly Ser Ile Met Lys Gly Gly Ala Val Ala Ala Asp Gly Arg 40 Ile Glu Pro Gly Asp Met Leu Leu Gln Val Asn Asp Met Asn Phe Glu Asn Met Ser Asn Asp Asp Ala Val Arg Val Leu Arg Asp Ile Val His 70 75 Lys Pro Gly Pro Ile Val Leu Thr Val Ala Lys Cys Trp Asp Pro Ser Pro Gln Asn Ser 100 <210> 699 <211> 95 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer <400> 699 Ile Ile Thr Val Thr Leu Asn Met Glu Lys Tyr Asn Phe Leu Gly Ile 5 Ser Ile Val Gly Gln Ser Asn Glu Arg Gly Asp Gly Gly Ile Tyr Ile 25 Gly Ser Ile Met Lys Gly Gly Ala Val Ala Ala Asp Gly Arg Ile Glu 40 Pro Gly Asp Met Leu Leu Gln Val Asn Glu Ile Asn Phe Glu Asn Met Ser Asn Asp Asp Ala Val Arg Val Leu Arg Glu Ile Val His Lys Pro 70 75 Gly Pro Ile Thr Leu Thr Val Ala Lys Cys Trp Asp Pro Ser Pro <210> 700 <211> 92 <212> PRT <213> Artificial Sequence <223> Synthetic polymer <400> 700 Thr Thr Gln Gln Ile Asp Leu Gln Gly Pro Gly Pro Trp Gly Phe Arg 10 Leu Val Gly Arg Lys Asp Phe Glu Gln Pro Leu Ala Ile Ser Arg Val 25 Thr Pro Gly Ser Lys Ala Ala Leu Ala Asn Leu Cys Ile Gly Asp Val 40 Ile Thr Ala Ile Asp Gly Glu Asn Thr Ser Asn Met Thr His Leu Glu 55 60 Ala Gln Asn Arg Ile Lys Gly Cys Thr Asp Asn Leu Thr Leu Thr Val 70 75

Ala Arg Ser Glu His Lys Val Trp Ser Pro Leu Val

85

```
<210> 701
<211> 89
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 701
Ile Phe Met Asp Ser Phe Lys Val Val Leu Glu Gly Pro Ala Pro Trp
                                    10
Gly Phe Arg Leu Gln Gly Gly Lys Asp Phe Asn Val Pro Leu Ser Ile
                                25
Ser Arg Leu Thr Pro Gly Gly Lys Ala Ala Gln Ala Gly Val Ala Val
                            40
                                                45
Gly Asp Trp Val Leu Ser Ile Asp Gly Glu Asn Ala Gly Ser Leu Thr
His Ile Glu Ala Gln Asn Lys Ile Arg Ala Cys Gly Glu Arg Leu Ser
                                        75
                    70
Leu Gly Leu Ser Arg Ala Gln Pro Val
                85
<210> 702
<211> 100
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 702
Gln Gly His Glu Leu Ala Lys Gln Glu Ile Arg Val Arg Val Glu Lys
Asp Pro Glu Leu Gly Phe Ser Ile Ser Gly Gly Val Gly Gly Arg Gly
                                25
Asn Pro Phe Arg Pro Asp Asp Gly Ile Phe Val Thr Arg Val Gln
Pro Glu Gly Pro Ala Ser Lys Leu Leu Gln Pro Gly Asp Lys Ile Ile
                        55
Gln Ala Asn Gly Tyr Ser Phe Ile Asn Ile Glu His Gly Gln Ala Val
Ser Leu Leu Lys Thr Phe Gln Asn Thr Val Glu Leu Ile Ile Val Arg
                                    90
Glu Val Ser Ser
            100
<210> 703
<211> 87
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 703
Ile Leu Cys Cys Leu Glu Lys Gly Pro Asn Gly Tyr Gly Phe His Leu
                                    10
His Gly Glu Lys Gly Lys Leu Gly Gln Tyr Ile Arg Leu Val Glu Pro
            20
                                25
```

Gly Ser Pro Ala Glu Lys Ala Gly Leu Leu Ala Gly Asp Arg Leu Val 40 Glu Val Asn Gly Glu Asn Val Glu Lys Glu Thr His Gln Gln Val Val 55 Ser Arg Ile Arg Ala Ala Leu Asn Ala Val Arg Leu Leu Val Val Asp 70 Pro Glu Phe Ile Val Thr Asp <210> 704 <211> 92 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer <400> 704 Ile Arg Leu Cys Thr Met Lys Lys Gly Pro Ser Gly Tyr Gly Phe Asn Leu His Ser Asp Lys Ser Lys Pro Gly Gln Phe Ile Arg Ser Val Asp 25 Pro Asp Ser Pro Ala Glu Ala Ser Gly Leu Arg Ala Gln Asp Arg Ile Val Glu Val Asn Gly Val Cys Met Glu Gly Lys Gln His Gly Asp Val Val Ser Ala Ile Arg Ala Gly Gly Asp Glu Thr Lys Leu Leu Val Val Asp Arg Glu Thr Asp Glu Phe Phe Met Asn Ser Ser 85 <210> 705 <211> 107 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer <400> 705 Lys Asn Pro Ser Gly Glu Leu Lys Thr Val Thr Leu Ser Lys Met Lys Gln Ser Leu Gly Ile Ser Ile Ser Gly Gly Ile Glu Ser Lys Val Gln 25 Pro Met Val Lys Ile Glu Lys Ile Phe Pro Gly Gly Ala Ala Phe Leu Ser Gly Ala Leu Gln Ala Gly Phe Glu Leu Val Ala Val Asp Gly Glu 55 Asn Leu Glu Gln Val Thr His Gln Arg Ala Val Asp Thr Ile Arg Arg 70 75 Ala Tyr Arg Asn Lys Ala Arg Glu Pro Met Glu Leu Val Val Arg Val 85 90 Pro Gly Pro Ser Pro Arg Pro Ser Pro Ser Asp 100 <210> 706 <211> 97 <212> PRT

```
<223> Synthetic polymer
<400> 706
Glu Gly His Ser His Pro Arg Val Val Glu Leu Pro Lys Thr Glu Glu
Gly Leu Gly Phe Asn Ile Met Gly Gly Lys Glu Gln Asn Ser Pro Ile
                                25
Tyr Ile Ser Arg Ile Ile Pro Gly Gly Ile Ala Asp Arg His Gly Gly
Leu Lys Arg Gly Asp Gln Leu Leu Ser Val Asn Gly Val Ser Val Glu
                        55
Gly Glu His His Glu Lys Ala Val Glu Leu Leu Lys Ala Ala Gln Gly
Lys Val Lys Leu Val Val Arg Tyr Thr Pro Lys Val Leu Glu Glu Met
                85
Glu
<210> 707
<211> 88
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 707
Pro Gly Ala Pro Tyr Ala Arg Lys Thr Phe Thr Ile Val Gly Asp Ala
                                    10
Val Gly Trp Gly Phe Val Val Arg Gly Ser Lys Pro Cys His Ile Gln
                                25
Ala Val Asp Pro Ser Gly Pro Ala Ala Ala Ala Gly Met Lys Val Cys
Gln Phe Val Val Ser Val Asn Gly Leu Asn Val Leu His Val Asp Tyr
                        55
Arg Thr Val Ser Asn Leu Ile Leu Thr Gly Pro Arg Thr Ile Val Met
                   70
Glu Val Met Glu Glu Leu Glu Cys
                85
<210> 708
<211> 97
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 708
Gly Gln Tyr Gly Glu Thr Val Lys Ile Val Arg Ile Glu Lys Ala
Arg Asp Ile Pro Leu Gly Ala Thr Val Arg Asn Glu Met Asp Ser Val
                                2.5
Ile Ile Ser Arg Ile Val Lys Gly Gly Ala Ala Glu Lys Ser Gly Leu
                            40
Leu His Glu Gly Asp Glu Val Leu Glu Ile Asn Gly Ile Glu Ile Arg
                        55
Gly Lys Asp Val Asn Glu Val Phe Asp Leu Leu Ser Asp Met His Gly
                                        75
Thr Leu Thr Phe Val Leu Ile Pro Ser Gln Gln Ile Lys Pro Pro Pro
```

<220>

```
<210> 709
<211> 98
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 709
Ile Leu Ala His Val Lys G
```

85

Glu Ile

```
<210> 710
<211> 104
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
```

<400> 710

Lys Pro Ser Gln Ala Ser Gly His Phe Ser Val Glu Leu Val Arg Gly 10 Tyr Ala Gly Phe Gly Leu Thr Leu Gly Gly Gly Arg Asp Val Ala Gly 25 Asp Thr Pro Leu Ala Val Arg Gly Leu Leu Lys Asp Gly Pro Ala Gln 40 45 Arg Cys Gly Arg Leu Glu Val Gly Asp Leu Val Leu His Ile Asn Gly 55 Glu Ser Thr Gln Gly Leu Thr His Ala Gln Ala Val Glu Arg Ile Arg 70 75 Ala Gly Gly Pro Gln Leu His Leu Val Ile Arg Arg Pro Leu Glu Thr 90 His Pro Gly Lys Pro Arg Gly Val 100

<210> 711 <211> 107 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer

```
<400> 711
Pro Val Met Ser Gln Cys Ala Cys Leu Glu Glu Val His Leu Pro Asn
                                    10
Ile Lys Pro Gly Glu Gly Leu Gly Met Tyr Ile Lys Ser Thr Tyr Asp
                                25
Gly Leu His Val Ile Thr Gly Thr Thr Glu Asn Ser Pro Ala Asp Arg
Ser Gln Lys Ile His Ala Gly Asp Glu Val Ile Gln Val Asn Gln Gln
                        55
Thr Val Val Gly Trp Gln Leu Lys Asn Leu Val Lys Lys Leu Arg Glu
                                       75
Asn Pro Thr Gly Val Leu Leu Leu Lys Lys Arg Pro Thr Gly Ser
                                   90
               85
Phe Asn Phe Thr Pro Glu Phe Ile Val Thr Asp
           100
<210> 712
<211> 100
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 712
Leu Asp Asp Glu Glu Asp Ser Val Lys Ile Ile Arg Leu Val Lys Asn
                                    10
Arg Glu Pro Leu Gly Ala Thr Ile Lys Lys Asp Glu Gln Thr Gly Ala
                                25
Ile Ile Val Ala Arg Ile Met Arg Gly Gly Ala Ala Asp Arg Ser Gly
                            40
Leu Ile His Val Gly Asp Glu Leu Arg Glu Val Asn Gly Ile Pro Val
                        55
Glu Asp Lys Arg Pro Glu Glu Ile Ile Gln Ile Leu Ala Gln Ser Gln
                                        75
Gly Ala Ile Thr Phe Lys Ile Ile Pro Gly Ser Lys Glu Glu Thr Pro
Ser Asn Ser Ser
           100
<210> 713
<211> 83
<212> PRT
<213> Artificial Sequence
<223> Synthetic polymer
<400> 713
Val Val Glu Leu Met Lys Lys Glu Gly Thr Thr Leu Gly Leu Thr Val
                                    10
Ser Gly Gly Ile Asp Lys Asp Gly Lys Pro Arg Val Ser Asn Leu Arg
                                25
Gln Gly Gly Ile Ala Ala Arg Ser Asp Gln Leu Asp Val Gly Asp Tyr
                            40
Ile Lys Ala Val Asn Gly Ile Asn Leu Ala Lys Phe Arg His Asp Glu
                        55
Ile Ile Ser Leu Leu Lys Asn Val Gly Glu Arg Val Val Leu Glu Val
                                        75
Glu Tyr Glu
```

```
<210> 714
<211> 110
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
Arg Ser Ser Val Ile Phe Arg Thr Val Glu Val Thr Leu His Lys Glu
                                    10
Gly Asn Thr Phe Gly Phe Val Ile Arg Gly Gly Ala His Asp Asp Arg
                                25
Asn Lys Ser Arg Pro Val Val Ile Thr Cys Val Arg Pro Gly Gly Pro
                            4.0
Ala Asp Arg Glu Gly Thr Ile Lys Pro Gly Asp Arg Leu Leu Ser Val
                        55
Asp Gly Ile Arg Leu Leu Gly Thr Thr His Ala Glu Ala Met Ser Ile
                                        75
Leu Lys Gln Cys Gly Gln Glu Ala Ala Leu Leu Ile Glu Tyr Asp Val
                85
                                    90
Ser Val Met Asp Ser Val Ala Thr Ala Ser Gly Asn Ser Ser
                                105
<210> 715
<211> 106
<212> PRT
<213> Artificial Sequence
<223> Synthetic polymer
<400> 715
His Val Ala Thr Ala Ser Gly Pro Leu Leu Val Glu Val Ala Lys Thr
                                    10
                                                         1.5
                - 5
Pro Gly Ala Ser Leu Gly Val Ala Leu Thr Thr Ser Met Cys Cys Asn
Lys Gln Val Ile Val Ile Asp Lys Ile Lys Ser Ala Ser Ile Ala Asp
                            40
Arg Cys Gly Ala Leu His Val Gly Asp His Ile Leu Ser Ile Asp Gly
                       55
Thr Ser Met Glu Tyr Cys Thr Leu Ala Glu Ala Thr Gln Phe Leu Ala
                    70
                                        75
Asn Thr Thr Asp Gln Val Lys Leu Glu Ile Leu Pro His His Gln Thr
Arg Leu Ala Leu Lys Gly Pro Asn Ser Ser
            100
<210> 716
<211> 97
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 716
Thr Glu Thr Thr Glu Val Val Leu Thr Ala Asp Pro Val Thr Gly Phe
                                    10
```

Gly Val Leu Gln Zer Tyr Ile Glu Ala Asp Ser Pro Ala Gly Asp Arg Val Met Ala Ile Asn Gly Ile Pro 50

Thr Glu Asp Ser Thr Phe Glu Glu Ala Ser Gln Leu Leu Arg Asp Ser Ser Ile Thr Ser Lys Val Thr Leu Glu Ile Gly Ile Glu Ile Gly Phe Asp Val Ala Glu Ser Ser Ser Ser

<210> 717

<211> 101

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic polymer

<400> 717

Ala Glu Ser Val Ile Pro Ser Ser Gly Thr Phe His Val Lys Leu Pro 1 5 10 15

Lys Lys His Asn Val Glu Leu Gly Ile Thr Ile Ser Ser Pro Ser Ser 20 25 30

Arg Lys Pro Gly Asp Pro Leu Val Ile Ser Asp Ile Lys Lys Gly Ser 35 40 45

Val Ala His Arg Thr Gly Thr Leu Glu Leu Gly Asp Lys Leu Leu Ala 50 55 60

Ile Asp Asn Ile Arg Leu Asp Asn Cys Ser Met Glu Asp Ala Val Gln 65 70 75 80

Ile Leu Gln Gln Cys Glu Asp Leu Val Lys Leu Lys Ile Arg Lys Asp 85 90 95

Glu Asp Asn Ser Asp 100

<210> 718

<211> 90

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic polymer

<400> 718

Ile Tyr Thr Val Glu Leu Lys Arg Tyr Gly Gly Pro Leu Gly Ile Thr
1 5 10 15

Ile Ser Gly Thr Glu Glu Pro Phe Asp Pro Ile Ile Ser Ser Leu
20 25 30

Thr.Lys Gly Gly Leu Ala Glu Arg Thr Gly Ala Ile His Ile Gly Asp 35 40 45

Arg Ile Leu Ala Ile Asn Ser Ser Ser Leu Lys Gly Lys Pro Leu Ser

Glu Ala Ile His Leu Leu Gln Met Ala Gly Glu Thr Val Thr Leu Lys 65 70 75 80

Ile Lys Lys Gln Thr Asp Ala Gln Ser Ala 85 90

```
<211> 95
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 719
Ile Met Ser Pro Thr Pro Val Glu Leu His Lys Val Thr Leu Tyr Lys
Asp Ser Asp Met Glu Asp Phe Gly Phe Ser Val Ala Asp Gly Leu Leu
                                25
Glu Lys Gly Val Tyr Val Lys Asn Ile Arg Pro Ala Gly Pro Gly Asp
Leu Gly Gly Leu Lys Pro Tyr Asp Arg Leu Leu Gln Val Asn His Val
                        5.5
                                             60
Arg Thr Arg Asp Phe Asp Cys Cys Leu Val Val Pro Leu Ile Ala Glu
                    70
                                        75
Ser Gly Asn Lys Leu Asp Leu Val Ile Ser Arg Asn Pro Leu Ala
                                    90
<210> 720
<211> 88
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 720
Ser Arg Gly Cys Glu Thr Arg Glu Leu Ala Leu Pro Arg Asp Gly Gln
                                    10
Gly Arg Leu Gly Phe Glu Val Asp Ala Glu Gly Phe Val Thr His Val
                                25
Glu Arg Phe Thr Phe Ala Glu Thr Ala Gly Leu Arg Pro Gly Ala Arg
Leu Leu Arg Val Cys Gly Gln Thr Leu Pro Ser Leu Arg Pro Glu Ala
                        55
Ala Ala Gln Leu Leu Arg Ser Ala Pro Lys Val Cys Val Thr Val Leu
Pro Pro Asp Glu Ser Gly Arg Pro
                85
<210> 721
<211> 95
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 721
Ala Lys Ala Lys Trp Arg Gln Val Val Leu Gln Lys Ala Ser Arg Glu
Ser Pro Leu Gln Phe Ser Leu Asn Gly Gly Ser Glu Lys Gly Phe Gly
                                25
Ile Phe Val Glu Gly Val Glu Pro Gly Ser Lys Ala Ala Asp Ser Gly
                            40
Leu Lys Arg Gly Asp Gln Ile Met Glu Val Asn Gly Gln Asn Phe Glu
                        55
                                            60
Asn Ile Thr Phe Met Lys Ala Val Glu Ile Leu Arg Asn Asn Thr His
```

```
70
                                        75
Leu Ala Leu Thr Val Lys Thr Asn Ile Phe Val Phe Lys Glu Leu
              85
                                    90
<210> 722
<211> 89
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 722
Leu Glu Asn Val Ile Ala Lys Ser Leu Leu Ile Lys Ser Asn Glu Gly
                                   10
                - 5
Ser Tyr Gly Phe Gly Leu Glu Asp Lys Asn Lys Val Pro Ile Ile Lys
                               25
Leu Val Glu Lys Gly Ser Asn Ala Glu Met Ala Gly Met Glu Val Gly
                           40
Lys Lys Ile Phe Ala Ile Asn Gly Asp Leu Val Phe Met Arg Pro Phe
Asn Glu Val Asp Cys Phe Leu Lys Ser Cys Leu Asn Ser Arg Lys Pro
                   70
                                       75
Leu Arg Val Leu Val Ser Thr Lys Pro
                85
<210> 723
<211> 82
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 723
Pro Arg Glu Thr Val Lys Ile Pro Asp Ser Ala Asp Gly Leu Gly Phe
                                    10
Gln Ile Arg Gly Phe Gly Pro Ser Val Val His Ala Val Gly Arg Gly
                                25
Thr Val Ala Ala Ala Gly Leu His Pro Gly Gln Cys Ile Ile Lys
                                               45
                           40
Val Asn Gly Ile Asn Val Ser Lys Glu Thr His Ala Ser Val Ile Ala
                        55
                                            60
His Val Thr Ala Cys Arg Lys Tyr Arg Arg Pro Thr Lys Gln Asp Ser
                   70
Ile Gln
<210> 724
<211> 100
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 724
Glu Asp Phe Cys Tyr Val Phe Thr Val Glu Leu Glu Arg Gly Pro Ser
                5
                                   10
Gly Leu Gly Met Gly Leu Ile Asp Gly Met His Thr His Leu Gly Ala
```

```
25
Pro Gly Leu Tyr Ile Gln Thr Leu Leu Pro Gly Ser Pro Ala Ala Ala
                            40
Asp Gly Arg Leu Ser Leu Gly Asp Arg Ile Leu Glu Val Asn Gly Ser
Ser Leu Leu Gly Leu Gly Tyr Leu Arg Ala Val Asp Leu Ile Arg His
Gly Gly Lys Lys Met Arg Phe Leu Val Ala Lys Ser Asp Val Glu Thr
Ala Lys Lys Ile
            100
<210> 725
<211> 109
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 725
Leu Thr Glu Phe Gln Asp Lys Gln Ile Lys Asp Trp Lys Lys Arg Phe
Ile Gly Ile Arg Met Arg Thr Ile Thr Pro Ser Leu Val Asp Glu Leu
                                25
Lys Ala Ser Asn Pro Asp Phe Pro Glu Val Ser Ser Gly Ile Tyr Val
                            40
Gln Glu Val Ala Pro Asn Ser Pro Ser Gln Arg Gly Gly Ile Gln Asp
                        55
Gly Asp Ile Ile Val Lys Val Asn Gly Arg Pro Leu Val Asp Ser Ser
                    70
                                        75
Glu Leu Gln Glu Ala Val Leu Thr Glu Ser Pro Leu Leu Glu Val
                85
                                    90
Arg Arg Gly Asn Asp Asp Leu Leu Phe Ser Asn Ser Ser
<210> 726
<211> 97
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 726
His Lys Lys Tyr Leu Gly Leu Gln Met Leu Ser Leu Thr Val Pro Leu
Ser Glu Glu Leu Lys Met His Tyr Pro Asp Phe Pro Asp Val Ser Ser
Gly Val Tyr Val Cys Lys Val Val Glu Gly Thr Ala Ala Gln Ser Ser
                            40
Gly Leu Arg Asp His Asp Val Ile Val Asn Ile Asn Gly Lys Pro Ile
                        55
Thr Thr Thr Asp Val Val Lys Ala Leu Asp Ser Asp Ser Leu Ser
                    70
                                        75
Met Ala Val Leu Arg Gly Lys Asp Asn Leu Leu Leu Thr Val Asn Ser
Ser
```

```
<210> 727
<211> 104
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 727
Ile Trp Gln Ile Glu Tyr Ile Asp Ile Glu Arg Pro Ser Thr Gly Gly
Leu Gly Phe Ser Val Val Ala Leu Arg Ser Gln Asn Leu Gly Lys Val
                                25
Asp Ile Phe Val Lys Asp Val Gln Pro Gly Ser Val Ala Asp Arg Asp
                            40
                                                 45
Gln Arg Leu Lys Glu Asn Asp Gln Ile Leu Ala Ile Asn His Thr Pro
                        55
                                             60
Leu Asp Gln Asn Ile Ser His Gln Gln Ala Ile Ala Leu Leu Gln Gln
                                        75
Thr Thr Gly Ser Leu Arg Leu Ile Val Ala Arg Glu Pro Val His Thr
Lys Ser Ser Thr Ser Ser Ser Glu
            100
<210> 728
<211> 78
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 728
Pro Gly His Val Glu Glu Val Glu Leu Ile Asn Asp Gly Ser Gly Leu
Gly Phe Gly Ile Val Gly Gly Lys Thr Ser Gly Val Val Val Arg Thr
                                25
Ile Val Pro Gly Gly Leu Ala Asp Arg Asp Gly Arg Leu Gln Thr Gly
Asp His Ile Leu Lys Ile Gly Gly Thr Asn Val Gln Gly Met Thr Ser
Glu Gln Val Ala Gln Val Leu Arg Asn Cys Gly Asn Ser Ser
<210> 729
<211> 111
<212> PRT
<213> Artificial Sequence
<223> Synthetic polymer
<400> 729
Pro Gly Ser Asp Ser Ser Leu Phe Glu Thr Tyr Asn Val Glu Leu Val
                                    10
Arg Lys Asp Gly Gln Ser Leu Gly Ile Arg Ile Val Gly Tyr Val Gly
                                25
            20
Thr Ser His Thr Gly Glu Ala Ser Gly Ile Tyr Val Lys Ser Ile Ile
                            40
Pro Gly Ser Ala Ala Tyr His Asn Gly His Ile Gln Val Asn Asp Lys
   50
                        55
                                             60
```

```
Ile Val Ala Val Asp Gly Val Asn Ile Gln Gly Phe Ala Asn His Asp
                    70
                                         75
Val Val Glu Val Leu Arg Asn Ala Gly Gln Val Val His Leu Thr Leu
                                    90
Val Arg Arg Lys Thr Ser Ser Ser Thr Ser Arg Ile His Arg Asp
                                105
            100
<210> 730
<211> 96
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 730
Asn Ser Asp Asp Ala Glu Leu Gln Lys Tyr Ser Lys Leu Leu Pro Ile
His Thr Leu Arg Leu Gly Val Glu Val Asp Ser Phe Asp Gly His His
Tyr Ile Ser Ser Ile Val Ser Gly Gly Pro Val Asp Thr Leu Gly Leu
                            40
                                                 45
Leu Gln Pro Glu Asp Glu Leu Leu Glu Val Asn Gly Met Gln Leu Tyr
                        55
Gly Lys Ser Arg Arg Glu Ala Val Ser Phe Leu Lys Glu Val Pro Pro
Pro Phe Thr Leu Val Cys Cys Arg Arg Leu Phe Asp Asp Glu Ala Ser
                                    90
<210> 731
<211> 102
<212> PRT
<213> Artificial Sequence
<223> Synthetic polymer
<400> 731
Leu Ser Ser Pro Glu Val Lys Ile Val Glu Leu Val Lys Asp Cys Lys
                                    10
Gly Leu Gly Phe Ser Ile Leu Asp Tyr Gln Asp Pro Leu Asp Pro Thr
                                25
Arg Ser Val Ile Val Ile Arg Ser Leu Val Ala Asp Gly Val Ala Glu
                            40
                                                 45
Arg Ser Gly Gly Leu Leu Pro Gly Asp Arg Leu Val Ser Val Asn Glu
Tyr Cys Leu Asp Asn Thr Ser Leu Ala Glu Ala Val Glu Ile Leu Lys
                    70
                                        75
Ala Val Pro Pro Gly Leu Val His Leu Gly Ile Cys Lys Pro Leu Val
                                    90
                85
Glu Phe Ile Val Thr Asp
            100
<210> 732
<211> 119
<212> PRT
<213> Artificial Sequence
```

<220>

<223> Synthetic polymer

```
<400> 732
Pro Asn Phe Ser His Trp Gly Pro Pro Arg Ile Val Glu Ile Phe Arg
Glu Pro Asn Val Ser Leu Gly Ile Ser Ile Val Val Gly Gln Thr Val
Ile Lys Arg Leu Lys Asn Gly Glu Glu Leu Lys Gly Ile Phe Ile Lys
                            40
Gln Val Leu Glu Asp Ser Pro Ala Gly Lys Thr Asn Ala Leu Lys Thr
Gly Asp Lys Ile Leu Glu Val Ser Gly Val Asp Leu Gln Asn Ala Ser
                    70
His Ser Glu Ala Val Glu Ala Ile Lys Asn Ala Gly Asn Pro Val Val
Phe Ile Val Gln Ser Leu Ser Ser Thr Pro Arg Val Ile Pro Asn Val
           100
                              105
His Asn Lys Ala Asn Ser Ser
        115
<210> 733
<211> 99
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 733
Pro Gly Glu Leu His Ile Ile Glu Leu Glu Lys Asp Lys Asn Gly Leu
                                   10
                -5
Gly Leu Ser Leu Ala Gly Asn Lys Asp Arg Ser Arg Met Ser Ile Phe
Val Val Gly Ile Asn Pro Glu Gly Pro Ala Ala Asp Gly Arg Met
                            40
Arg Ile Gly Asp Glu Leu Leu Glu Ile Asn Asn Gln Ile Leu Tyr Gly
                        55
Arg Ser His Gln Asn Ala Ser Ala Ile Ile Lys Thr Ala Pro Ser Lys
                                       75
                   70
Val Lys Leu Val Phe Ile Arg Asn Glu Asp Ala Val Asn Gln Met Ala
Asn Ser Ser
<210> 734
<211> 93
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 734
Pro Ala Thr Cys Pro Ile Val Pro Gly Gln Glu Met Ile Ile Glu Ile
                                    10
Ser Lys Gly Arg Ser Gly Leu Gly Leu Ser Ile Val Gly Gly Lys Asp
Thr Pro Leu Asn Ala Ile Val Ile His Glu Val Tyr Glu Glu Gly Ala
                            40
Ala Ala Arg Asp Gly Arg Leu Trp Ala Gly Asp Gln Ile Leu Glu Val
Asn Gly Val Asp Leu Arg Asn Ser Ser His Glu Glu Ala Ile Thr Ala
```

```
80
Leu Arg Gln Thr Pro Gln Lys Val Arg Leu Val Val Tyr
                85
<210> 735
<211> 103
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 735
Ile Leu Thr Leu Thr Ile Leu Arg Gln Thr Gly Gly Leu Gly Ile Ser
                5
Ile Ala Gly Gly Lys Gly Ser Thr Pro Tyr Lys Gly Asp Asp Glu Gly
                                25
Ile Phe Ile Ser Arg Val Ser Glu Glu Gly Pro Ala Ala Arg Ala Gly
                            40
Val Arg Val Gly Asp Lys Leu Leu Glu Val Asn Gly Val Ala Leu Gln
Gly Ala Glu His His Glu Ala Val Glu Ala Leu Arg Gly Ala Gly Thr
                   70
                                        75
Ala Val Gln Met Arg Val Trp Arg Glu Arg Met Val Glu Pro Glu Asn
                                    90
Ala Glu Phe Ile Val Thr Asp
            100
<210> 736
<211> 97
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 736
Pro Leu Arg Gln Arg His Val Ala Cys Leu Ala Arg Ser Glu Arg Gly
Leu Gly Phe Ser Ile Ala Gly Gly Lys Gly Ser Thr Pro Tyr Arg Ala
                                25
Gly Asp Ala Gly Ile Phe Val Ser Arg Ile Ala Glu Gly Gly Ala Ala
                            40
His Arg Ala Gly Thr Leu Gln Val Gly Asp Arg Val Leu Ser Ile Asn
                        55
Gly Val Asp Val Thr Glu Ala Arg His Asp His Ala Val Ser Leu Leu
                    70
Thr Ala Ala Ser Pro Thr Ile Ala Leu Leu Leu Glu Arg Glu Ala Gly
Gly
<210> 737
<211> 106
<212> PRT
<213> Artificial Sequence
<220>
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<223> Synthetic polymer

```
<400> 737
Ile Leu Glu Gly Pro Tyr Pro Val Glu Glu Ile Arg Leu Pro Arg Ala
                                   10 -
Gly Gly Pro Leu Gly Leu Ser Ile Val Gly Gly Ser Asp His Ser Ser
His Pro Phe Gly Val Gln Glu Pro Gly Val Phe Ile Ser Lys Val Leu
Pro Arg Gly Leu Ala Ala Arg Ser Gly Leu Arg Val Gly Asp Arg Ile
                        55
Leu Ala Val Asn Gly Gln Asp Val Arg Asp Ala Thr His Gln Glu Ala
                                       75
Val Ser Ala Leu Leu Arg Pro Cys Leu Glu Leu Ser Leu Leu Val Arg
                                   90
               85
Arg Asp Pro Ala Glu Phe Ile Val Thr Asp
<210> 738
<211> 105
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 738
Arg Glu Leu Cys Ile Gln Lys Ala Pro Gly Glu Arg Leu Gly Ile Ser
                                    10
Ile Arg Gly Gly Ala Arg Gly His Ala Gly Asn Pro Arg Asp Pro Thr
                                25
Asp Glu Gly Ile Phe Ile Ser Lys Val Ser Pro Thr Gly Ala Ala Gly
                           40
                                               45
Arg Asp Gly Arg Leu Arg Val Gly Leu Arg Leu Leu Glu Val Asn Gln
Gln Ser Leu Leu Gly Leu Thr His Gly Glu Ala Val Gln Leu Leu Arg
                   70
Ser Val Gly Asp Thr Leu Thr Val Leu Val Cys Asp Gly Phe Glu Ala
Ser Thr Asp Ala Ala Leu Glu Val Ser
    100
<210> 739
<211> 91
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 739
Pro His Gln Pro Ile Val Ile His Ser Ser Gly Lys Asn Tyr Gly Phe
                                    10
                5
Thr Ile Arg Ala Ile Arg Val Tyr Val Gly Asp Ser Asp Ile Tyr Thr
                                25
Val His His Ile Val Trp Asn Val Glu Glu Gly Ser Pro Ala Cys Gln
                           40
Ala Gly Leu Lys Ala Gly Asp Leu Ile Thr His Ile Asn Gly Glu Pro
Val His Gly Leu Val His Thr Glu Val Ile Glu Leu Leu Leu Ser
                   70
                                       7.5
Gly Asn Lys Val Ser Ile Thr Thr Thr Pro Phe
                                    90
```

```
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 740
Ile Leu Ala Cys Ala Ala Lys Ala Lys Arg Arg Leu Met Thr Leu Thr
                                    10
Lys Pro Ser Arg Glu Ala Pro Leu Pro Phe Ile Leu Leu Gly Gly Ser
                                25
Glu Lys Gly Phe Gly Ile Phe Val Asp Ser Val Asp Ser Gly Ser Lys
                           40
                                                45
Ala Thr Glu Ala Gly Leu Lys Arg Gly Asp Gln Ile Leu Glu Val Asn
                       55
Gly Gln Asn Phe Glu Asn Ile Gln Leu Ser Lys Ala Met Glu Ile Leu
                                        75
Arg Asn Asn Thr His Leu Ser Ile Thr Val Lys Thr Asn Leu Phe Val
               85
Phe Lys Glu Leu Leu Thr Asn Ser Ser
           100
<210> 741
<211> 88
<212> PRT
<213> Artificial Sequence
<223> Synthetic polymer
<400> 741
Ile Pro Pro Ala Pro Arg Lys Val Glu Met Arg Arg Asp Pro Val Leu
Gly Phe Gly Phe Val Ala Gly Ser Glu Lys Pro Val Val Arg Ser
Val Thr Pro Gly Gly Pro Ser Glu Gly Lys Leu Ile Pro Gly Asp Gln
                            40
Ile Val Met Ile Asn Asp Glu Pro Val Ser Ala Ala Pro Arg Glu Arg
Val Ile Asp Leu Val Arg Ser Cys Lys Glu Ser Ile Leu Leu Thr Val
                   70
Ile Gln Pro Tyr Pro Ser Pro Lys
               85
<210> 742
<211> 101
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 742
Leu Asn Lys Arg Thr Thr Met Pro Lys Asp Ser Gly Ala Leu Leu Gly
                                    10
Leu Lys Val Val Gly Gly Lys Met Thr Asp Leu Gly Arg Leu Gly Ala
            20
                                25
                                     179
```

<210> 740 <211> 105 <212> PRT

Phe Ile Thr Lys Val Lys Lys Gly Ser Leu Ala Asp Val Val Gly His 40 Leu Arg Ala Gly Asp Glu Val Leu Glu Trp Asn Gly Lys Pro Leu Pro 55 Gly Ala Thr Asn Glu Glu Val Tyr Asn Ile Ile Leu Glu Ser Lys Ser 70 75 Glu Pro Gln Val Glu Ile Ile Val Ser Arg Pro Ile Gly Asp Ile Pro Arg Ile His Arg Asp 100 <210> 743 <211> 79 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer <400> 743 Gln Arg Cys Val Ile Ile Gln Lys Asp Gln His Gly Phe Gly Phe Thr 10 Val Ser Gly Asp Arg Ile Val Leu Val Gln Ser Val Arg Pro Gly Gly Ala Ala Met Lys Ala Gly Val Lys Glu Gly Asp Arg Ile Ile Lys Val 40 Asn Gly Thr Met Val Thr Asn Ser Ser His Leu Glu Val Val Lys Leu 55 Ile Lys Ser Gly Ala Tyr Val Ala Leu Thr Leu Leu Gly Ser Ser 70 <210> 744 <211> 87 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer <400> '744 Ile Leu Val Gln Arg Cys Val Ile Ile Gln Lys Asp Asp Asn Gly Phe 10 Gly Leu Thr Val Ser Gly Asp Asn Pro Val Phe Val Gln Ser Val Lys 20 25 Glu Asp Gly Ala Ala Met Arg Ala Gly Val Gln Thr Gly Asp Arg Ile 40 Ile Lys Val Asn Gly Thr Leu Val Thr His Ser Asn His Leu Glu Val 55 60 Val Lys Leu Ile Lys Ser Gly Ser Tyr Val Ala Leu Thr Val Gln Gly Arg Pro Pro Gly Asn Ser Ser 85 <210> 745 <211> 79 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer

```
<400> 745
Ser Val Glu Met Thr Leu Arg Arg Asn Gly Leu Gly Gln Leu Gly Phe
                                    10
His Val Asn Tyr Glu Gly Ile Val Ala Asp Val Glu Pro Tyr Gly Tyr
Ala Trp Gln Ala Gly Leu Arg Gln Gly Ser Arg Leu Val Glu Ile Cys
Lys Val Ala Val Ala Thr Leu Ser His Glu Gln Met Ile Asp Leu Leu
Arg Thr Ser Val Thr Val Lys Val Val Ile Ile Pro Pro His Asp
<210> 746
<211> 96
<212> PRT
<213> Artificial Sequence
<220>.
<223> Synthetic polymer
<400> 746
Leu Lys Val Met Thr Ser Gly Trp Glu Thr Val Asp Met Thr Leu Arg
Arg Asn Gly Leu Gly Gln Leu Gly Phe His Val Lys Tyr Asp Gly Thr
                                25
Val Ala Glu Val Glu Asp Tyr Gly Phe Ala Trp Gln Ala Gly Leu Arg
                            40
Gln Gly Ser Arg Leu Val Glu Ile Cys Lys Val Ala Val Val Thr Leu
                       55
                                            60
Thr His Asp Gln Met Ile Asp Leu Leu Arg Thr Ser Val Thr Val Lys
Val Val Ile Ile Pro Pro Phe Glu Asp Gly Thr Pro Arg Arg Gly Trp
                                    90
<210> 747
<211> 105
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 747
His Tyr Ile Phe Pro His Ala Arg Ile Lys Ile Thr Arg Asp Ser Lys
Asp His Thr Val Ser Gly Asn Gly Leu Gly Ile Arg Ile Val Gly Gly
Lys Glu Ile Pro Gly His Ser Gly Glu Ile Gly Ala Tyr Ile Ala Lys
                            40
Ile Leu Pro Gly Gly Ser Ala Glu Gln Thr Gly Lys Leu Met Glu Gly
                       55
Met Gln Val Leu Glu Trp Asn Gly Ile Pro Leu Thr Ser Lys Thr Tyr
                                        75
Glu Glu Val Gln Ser Ile Ile Ser Gln Gln Ser Gly Glu Ala Glu Ile
               85
Cys Val Arg Leu Asp Leu Asn Met Leu
```

100

```
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 748
Leu Cys Gly Ser Leu Arg Pro Pro Ile Val Ile His Ser Ser Gly Lys
                                    10
Lys Tyr Gly Phe Ser Leu Arg Ala Ile Arg Val Tyr Met Gly Asp Ser
                                25
Asp Val Tyr Thr Val His His Val Val Trp Ser Val Glu Asp Gly Ser
                            40
Pro Ala Gln Glu Ala Gly Leu Arg Ala Gly Asp Leu Ile Thr His Ile
                        55
Asn Gly Glu Ser Val Leu Gly Leu Val His Met Asp Val Val Glu Leu
                    70
                                        75
Leu Leu Lys Ser Gly Asn Lys Ile Ser Leu Arg Thr Thr Ala Leu Glu
                85
                                    90
Asn Thr Ser Ile Lys Val Gly
            100
<210> 749
<211> 86
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 749
Ser Tyr Ser Val Thr Leu Thr Gly Pro Gly Pro Trp Gly Phe Arg Leu
                                    10
Gln Gly Gly Lys Asp Phe Asn Met Pro Leu Thr Ile Ser Arg Ile Thr
Pro Gly Ser Lys Ala Ala Gln Ser Gln Leu Ser Gln Gly Asp Leu Val
                            40
Val Ala Ile Asp Gly Val Asn Thr Asp Thr Met Thr His Leu Glu Ala
                        55
Gln Asn Lys Ile Lys Ser Ala Ser Tyr Asn Leu Ser Leu Thr Leu Gln
Lys Ser Lys Asn Ser Ser
                85
<210> 750
<211> 91
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 750
Ile Ser Arg Asp Ser Gly Ala Met Leu Gly Leu Lys Val Val Gly Gly
                                    10
Lys Met Thr Glu Ser Gly Arg Leu Cys Ala Phe Ile Thr Lys Val Lys
                                25
Lys Gly Ser Leu Ala Asp Thr Val Gly His Leu Arg Pro Gly Asp Glu
Val Leu Glu Trp Asn Gly Arg Leu Leu Gln Gly Ala Thr Phe Glu Glu
```

<211> 103

```
50
                        55
Val Tyr Asn Ile Ile Leu Glu Ser Lys Pro Glu Pro Gln Val Glu Leu
                                       75
                    70
Val Val Ser Arg Pro Ile Ala Ile His Arg Asp
                85
<210> 751
<211> 101
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 751
Ile Ser Ala Leu Gly Ser Met Arg Pro Pro Ile Ile Ile His Arg Ala
                                    10
Gly Lys Lys Tyr Gly Phe Thr Leu Arg Ala Ile Arg Val Tyr Met Gly
            20
                                25
Asp Ser Asp Val Tyr Thr Val His His Met Val Trp His Val Glu Asp
Gly Gly Pro Ala Ser Glu Ala Gly Leu Arg Gln Gly Asp Leu Ile Thr
                                             60
                        55
His Val Asn Gly Glu Pro Val His Gly Leu Val His Thr Glu Val Val
                                        75
Glu Leu Ile Leu Lys Ser Gly Asn Lys Val Ala Ile Ser Thr Thr Pro
                                    90
Leu Glu Asn Ser Ser
            100
<210> 752
<211> 94
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 752
Phe Ser Asp Met Arg Ile Ser Ile Asn Gln Thr Pro Gly Lys Ser Leu
                                    10
Asp Phe Gly Phe Thr Ile Lys Trp Asp Ile Pro Gly Ile Phe Val Ala
           20
                                25
Ser Val Glu Ala Gly Ser Pro Ala Glu Phe Ser Gln Leu Gln Val Asp
                            40
Asp Glu Ile Ile Ala Ile Asn Asn Thr Lys Phe Ser Tyr Asn Asp Ser
                        55
Lys Glu Trp Glu Glu Ala Met Ala Lys Ala Gln Glu Thr Gly His Leu
Val Met Asp Val Arg Arg Tyr Gly Lys Ala Gly Ser Pro Glu
<210> 753
<211> 98
<212> PRT
<213> Artificial Sequence
<220>
```

<223> Synthetic polymer

```
Gln Ser Ala His Leu Glu Val Ile Gln Leu Ala Asn Ile Lys Pro Ser
                                    10
Glu Gly Leu Gly Met Tyr Ile Lys Ser Thr Tyr Asp Gly Leu His Val
                                25
Ile Thr Gly Thr Thr Glu Asn Ser Pro Ala Asp Arg. Cys Lys Lys Ile
His Ala Gly Asp Glu Val Ile Gln Val Asn His Gln Thr Val Val Gly
                       55
Trp Gln Leu Lys Asn Leu Val Asn Ala Leu Arg Glu Asp Pro Ser Gly
Val Ile Leu Thr Leu Lys Lys Arg Pro Gln Ser Met Leu Thr Ser Ala
                                    90
Pro Ala
<210> 754
<211> 100
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 754
Ile Leu Thr Gln Thr Leu Ile Pro Val Arg His Thr Val Lys Ile Asp
                                    10
Lys Asp Thr Leu Leu Gln Asp Tyr Gly Phe His Ile Ser Glu Ser Leu
                                25
Pro Leu Thr Val Val Ala Val Thr Ala Gly Gly Ser Ala His Gly Lys
                            40
Leu Phe Pro Gly Asp Gln Ile Leu Gln Met Asn Asn Glu Pro Ala Glu
                        55
Asp Leu Ser Trp Glu Arg Ala Val Asp Ile Leu Arg Glu Ala Glu Asp
                    70
Ser Leu Ser Ile Thr Val Val Arg Cys Thr Ser Gly Val Pro Lys Ser
Ser Asn Ser Ser
<210> 755
<211> 93
<212> PRT
<213> Artificial Sequence
<223> Synthetic polymer
<400> 755
Gly Leu Arg Ser Pro Ile Thr Ile Gln Arg Ser Gly Lys Lys Tyr Gly
                                    10
Phe Thr Leu Arg Ala Ile Arg Val Tyr Met Gly Asp Thr Asp Val Tyr
                                25
Ser Val His His Ile Val Trp His Val Glu Glu Gly Gly Pro Ala Gln
                            40
Glu Ala Gly Leu Cys Ala Gly Asp Leu Ile Thr His Val Asn Gly Glu
                                            60
                        55
Pro Val His Gly Met Val His Pro Glu Val Val Glu Leu Ile Leu Lys
                    70
                                        75
Ser Gly Asn Lys Val Ala Val Thr Thr Thr Pro Phe Glu
                                    90
                85
```

<400> 753

```
<210> 756
<211> 107
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 756
Gln Gly Glu Glu Thr Lys Ser Leu Thr Leu Val Leu His Arg Asp Ser
                                    10
Gly Ser Leu Gly Phe Asn Ile Ile Gly Gly Arg Pro Ser Val Asp Asn
            20
                                25
His Asp Gly Ser Ser Ser Glu Gly Ile Phe Val Ser Lys Ile Val Asp
                            40
                                                 45
Ser Gly Pro Ala Ala Lys Glu Gly Gly Leu Gln Ile His Asp Arg Ile
                        55
Ile Glu Val Asn Gly Arg Asp Leu Ser Arg Ala Thr His Asp Gln Ala
                    70
                                        75
Val Glu Ala Phe Lys Thr Ala Lys Glu Pro Ile Val Val Gln Val Leu
                85
                                    90
Arg Arg Thr Pro Arg Thr Lys Met Phe Thr Pro
<210> 757
<211> 101
<212> PRT
<213> Artificial Sequence
<223> Synthetic polymer
<400> 757
Gln Glu Met Asp Arg Glu Glu Leu Glu Glu Glu Val Asp Leu Tyr
                -5
                                    10
Arg Met Asn Ser Gln Asp Lys Leu Gly Leu Thr Val Cys Tyr Arg Thr
                                25
Asp Asp Glu Asp Asp Ile Gly Ile Tyr Ile Ser Glu Ile Asp Pro Asn
                            40
Ser Ile Ala Ala Lys Asp Gly Arg Ile Arg Glu Gly Asp Arg Ile Ile
                        55
Gln Ile Asn Gly Ile Glu Val Gln Asn Arg Glu Glu Ala Val Ala Leu
                                        75
                    70
Leu Thr Ser Glu Glu Asn Lys Asn Phe Ser Leu Leu Ile Ala Arg Pro
Glu Leu Gln Leu Asp
            100
<210> 758
<211> 91
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 758
Arg Ser Phe Gln Tyr Val Pro Val Gln Leu Gln Gly Gly Ala Pro Trp
                                    10
```

Gly Phe Thr Leu Lys Gly Gly Leu Glu His Cys Glu Pro Leu Thr Val 25 Ser Lys Ile Glu Asp Gly Gly Lys Ala Ala Leu Ser Gln Lys Met Arg 40 Thr Gly Asp Glu Leu Val Asn Ile Asn Gly Thr Pro Leu Tyr Gly Ser 55 Arg Gln Glu Ala Leu Ile Leu Ile Lys Gly Ser Phe Arg Ile Leu Lys Leu Ile Val Arg Arg Arg Asn Ala Pro Val Ser 85 <210> 759 <211> 102 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer <400> 759 Ile Leu Glu Lys Leu Glu Leu Phe Pro Val Glu Leu Glu Lys Asp Glu 10 Asp Gly Leu Gly Ile Ser Ile Ile Gly Met Gly Val Gly Ala Asp Ala 25 Gly Leu Glu Lys Leu Gly Ile Phe Val Lys Thr Val Thr Glu Gly Gly 40 Ala Ala Gln Arg Asp Gly Arg Ile Gln Val Asn Asp Gln Ile Val Glu Val Asp Gly Ile Ser Leu Val Gly Val Thr Gln Asn Phe Ala Ala Thr 75 70 Val Leu Arg Asn Thr Lys Gly Asn Val Arg Phe Val Ile Gly Arg Glu 90 85 Lys Pro Gly Gln Val Ser 100 <210> 760 <211> 113 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer <400> 760 Lys Asp Val Asn Val Tyr Val Asn Pro Lys Leu Thr Val Ile Lys Ala Lys Glu Gln Leu Lys Leu Leu Glu Val Leu Val Gly Ile Ile His Gln Thr Lys Trp Ser Trp Arg Arg Thr Gly Lys Gln Gly Asp Gly Glu 40 Arg Leu Val Val His Gly Leu Leu Pro Gly Gly Ser Ala Met Lys Ser 55 60 Gly Gln Val Leu Ile Gly Asp Val Leu Val Ala Val Asn Asp Val Asp 70 75 Val Thr Thr Glu Asn Ile Glu Arg Val Leu Ser Cys Ile Pro Gly Pro 90 Met Gln Val Lys Leu Thr Phe Glu Asn Ala Tyr Asp Val Lys Arg Glu 100 105 Thr

```
<210> 761
<211> 90
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 761
Thr Arg Gly Cys Glu Thr Val Glu Met Thr Leu Arg Arg Asn Gly Leu
                                    10
Gly Gln Leu Gly Phe His Val Asn Phe Glu Gly Ile Val Ala Asp Val
Glu Pro Phe Gly Phe Ala Trp Lys Ala Gly Leu Arg Gln Gly Ser Arg
                            4.0
Leu Val Glu Ile Cys Lys Val Ala Val Ala Thr Leu Thr His Glu Gln
                        55
Met Ile Asp Leu Leu Arg Thr Ser Val Thr Val Lys Val Val Ile Ile
                    70
Gln Pro His Asp Asp Gly Ser Pro Arg Arg
                85
<210> 762
<211> 96
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 762
Val Glu Asn Ile Leu Ala Lys Arg Leu Leu Ile Leu Pro Gln Glu Glu
                                    10
Asp Tyr Gly Phe Asp Ile Glu Glu Lys Asn Lys Ala Val Val Lys
                                25
Ser Val Gln Arg Gly Ser Leu Ala Glu Val Ala Gly Leu Gln Val Gly
                            40
Arg Lys Ile Tyr Ser Ile Asn Glu Asp Leu Val Phe Leu Arg Pro Phe
                        55
Ser Glu Val Glu Ser Ile Leu Asn Gln Ser Phe Cys Ser Arg Arg Pro
                   70
                                        75
Leu Arg Leu Leu Val Ala Thr Lys Ala Lys Glu Ile Ile Lys Ile Pro
                                    90
<210> 763
<211> 103
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 763
Pro Asp Ser Ala Gly Pro Gly Glu Val Arg Leu Val Ser Leu Arg Arg
                                    10
Ala Lys Ala His Glu Gly Leu Gly Phe Ser Ile Arg Gly Gly Ser Glu
                                25
His Gly Val Gly Ile Tyr Val Ser Leu Val Glu Pro Gly Ser Leu Ala
Glu Lys Glu Gly Leu Arg Val Gly Asp Gln Ile Leu Arg Val Asn Asp
```

```
50
                        55
Lys Ser Leu Ala Arg Val Thr His Ala Glu Ala Val Lys Ala Leu Lys
                    70
                                        75
Gly Ser Lys Lys Leu Val Leu Ser Val Tyr Ser Ala Gly Arg Ile Pro
                                    90
                85
Gly Gly Tyr Val Thr Asn His
            100
<210> 764
<211> 100
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 764
Leu Gln Gly Gly Asp Glu Lys Lys Val Asn Leu Val Leu Gly Asp Gly
                                    10
Arg Ser Leu Gly Leu Thr Ile Arg Gly Gly Ala Glu Tyr Gly Leu Gly
Ile Tyr Ile Thr Gly Val Asp Pro Gly Ser Glu Ala Glu Gly Ser Gly
                            40
Leu Lys Val Gly Asp Gln Ile Leu Glu Val Asn Trp Arg Ser Phe Leu
                        55
Asn Ile Leu His Asp Glu Ala Val Arg Leu Leu Lys Ser Ser Arg His
                    70
                                       75
Leu Ile Leu Thr Val Lys Asp Val Gly Arg Leu Pro His Ala Arg Thr
Thr Val Asp Glu
            100
<210> 765
<211> 87
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 765
Trp Thr Ser Gly Ala His Val His Ser Gly Pro Cys Glu Glu Lys Cys
                                    10
Gly His Pro Gly His Arg Gln Pro Leu Pro Arg Ile Val Thr Ile Gln
                                25
Arg Gly Gly Ser Ala His Asn Cys Gly Gln Leu Lys Val Gly His Val
                            40
Ile Leu Glu Val Asn Gly Leu Thr Leu Arg Gly Lys Glu His Arg Glu
                        55
Ala Ala Arg Ile Ile Ala Glu Ala Phe Lys Thr Lys Asp Arg Asp Tyr
                    70
Ile Asp Phe Leu Asp Ser Leu
                85
<210> 766
<211> 100
<212> PRT
<213> Artificial Sequence
```

<220>

```
<223> Synthetic polymer
<400> 766
Glu Leu Arg Arg Ala Glu Leu Val Glu Ile Ile Val Glu Thr Glu Ala
                                    10
Gln Thr Gly Val Ser Gly Ile Asn Val Ala Gly Gly Gly Lys Glu Gly
                                25
Ile Phe Val Arg Glu Leu Arg Glu Asp Ser Pro Ala Ala Arg Ser Leu
                           40
Ser Leu Gln Glu Gly Asp Gln Leu Leu Ser Ala Arg Val Phe Phe Glu
                       55
Asn Phe Lys Tyr Glu Asp Ala Leu Arg Leu Leu Gln Cys Ala Glu Pro
                                    75
Tyr Lys Val Ser Phe Cys Leu Lys Arg Thr Val Pro Thr Gly Asp Leu
                                   90
Ala Leu Arg Pro
            100
<210> 767
<211> 102
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 767
Pro Ser Gln Leu Lys Gly Val Leu Val Arg Ala Ser Leu Lys Lys Ser
                                    10
Thr Met Gly Phe Gly Phe Thr Ile Ile Gly Gly Asp Arg Pro Asp Glu
```

Pro Asp Asp Ser Glu Asp 100

```
Asp Val Pro Leu Leu Ile Leu Arg Gly Gly Pro Pro Ser Pro Thr Lys
Thr Ala Lys Met
           100
<210> 769
<211> 143
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 769
Leu Tyr Glu Asp Lys Pro Pro Leu Thr Asn Thr Phe Leu Ile Ser Asn
Pro Arg Thr Thr Ala Asp Pro Arg. Ile Leu Tyr Glu Asp Lys Pro Pro
                               25
Asn Thr Lys Asp Leu Asp Val Phe Leu Arg Lys Gln Glu Ser Gly Phe
Gly Phe Arg Val Leu Gly Gly Asp Gly Pro Asp Gln Ser Ile Tyr Ile
                       55
Gly Ala Ile Ile Pro Leu Gly Ala Ala Glu Lys Asp Gly Arg Leu Arg
Ala Ala Asp Glu Leu Met Cys Ile Asp Gly Ile Pro Val Lys Gly Lys
               85
                                   90
Ser His Lys Gln Val Leu Asp Leu Met Thr Thr Ala Ala Arg Asn Gly
           100
                              105
His Val Leu Leu Thr Val Arg Arg Lys Ile Phe Tyr Gly Glu Lys Gln
                          120
Pro Glu Asp Asp Ser Gly Ser Pro Gly Ile His Arg Glu Leu Thr
   130 ,
                      135
<210> 770
<211> 102
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 770
Pro Ala Pro Gln Glu Pro Tyr Asp Val Val Leu Gln Arg Lys Glu Asn
                                   10
Glu Gly Phe Gly Phe Val Ile Leu Thr Ser Lys Asn Lys Pro Pro Pro
                               25
           20
Gly Val Ile Pro His Lys Ile Gly Arg Val Ile Glu Gly Ser Pro Ala
                           40
Asp Arg Cys Gly Lys Leu Lys Val Gly Asp His Ile Ser Ala Val Asn
                       55
Gly Gln Ser Ile Val Glu Leu Ser His Asp Asn Ile Val Gln Leu Ile
                   70
                                      75
Lys Asp Ala Gly Val Thr Val Thr Leu Thr Val Ile Ala Glu Glu Glu
                                   90
              85
His His Gly Pro Pro Ser
          100
<210> 771
<211> 98
```

<212> PRT

```
<220>
<223> Synthetic polymer
<400> 771
Gln Asn Leu Gly Cys Tyr Pro Val Glu Leu Glu Arg Gly Pro Arg Gly
Phe Gly Phe Ser Leu Arg Gly Gly Lys Glu Tyr Asn Met Gly Leu Phe
                                25
Ile Leu Arg Leu Ala Glu Asp Gly Pro Ala Ile Lys Asp Gly Arg Ile
His Val Gly Asp Gln Ile Val Glu Ile Asn Gly Glu Pro Thr Gln Gly
                        55
Ile Thr His Thr Arg Ala Ile Glu Leu Ile Gln Ala Gly Gly Asn Lys
                    70
                                        75
Val Leu Leu Leu Arg Pro Gly Thr Gly Leu Ile Pro Asp His Gly
                85
Leu Ala
<210> 772
<211> 84
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 772
Ile Thr Val Val Glu Leu Ile Lys Lys Glu Gly Ser Thr Leu Gly Leu
Thr Ile Ser Gly Gly Thr Asp Lys Asp Gly Lys Pro Arg Val Ser Asn
Leu Arg Pro Gly Gly Leu Ala Ala Arg Ser Asp Leu Leu Asn Ile Gly
Asp Tyr Ile Arg Ser Val Asn Gly Ile His Leu Thr Arg Leu Arg His
                       55
                                            60
Asp Glu Ile Ile Thr Leu Leu Lys Asn Val Gly Glu Arg Val Val Leu
Glu Val Glu Tyr
<210> 773
<211> 92
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 773
Ile Leu Asp Val Ser Leu Tyr Lys Glu Gly Asn Ser Phe Gly Phe Val
                                    10
Leu Arg Gly Gly Ala His Glu Asp Gly His Lys Ser Arg Pro Leu Val
                                25
Leu Thr Tyr Val Arg Pro Gly Gly Pro Ala Asp Arg Glu Gly Ser Leu
                            40
Lys Val Gly Asp Arg Leu Leu Ser Val Asp Gly Ile Pro Leu His Gly
Ala Ser His Ala Thr Ala Leu Ala Thr Leu Arg Gln Cys Ser His Glu
```

191

```
65 70 75 80
Ala Leu Phe Glo Val Glu Tyr Asp Val Ala Thr Pro
```

Ala Leu Phe Gln Val Glu Tyr Asp Val Ala Thr Pro 85 90

<210> 774
<211> 102
<212> PRT
<213> Artificial Sequence

<220> <223> Synthetic polymer

<400> 774

Gln Ser Gln Arg Pro Leu 100

<210> 775 <211> 103 <212> PRT <213> Artificial Sequence

<220> <223> Synthetic polymer

<400> 775

 Ile Gln Ile Gln

Phe Asp Val Ala Glu Ser Val 100

<210> 776 <211> 103 <212> PRT <213> Artificial Sequence <220>

<223> Synthetic polymer

```
Ile Gln Phe Asp Val Ala Glu Ser Val Ile Pro Ser Ser Gly Thr Phe
                                    10
His Val Lys Leu Pro Lys Lys Arg Ser Val Glu Leu Gly Ile Thr Ile
                                 25
Ser Ser Ala Ser Arg Lys Arg Gly Glu Pro Leu Ile Ile Ser Asp Ile
Lys Lys Gly Ser Val Ala His Arg Thr Gly Thr Leu Glu Pro Gly Asp
                        55
Lys Leu Leu Ala Ile Asp Asn Ile Arg Leu Asp Asn Cys Pro Met Glu
Asp Ala Val Gln Ile Leu Arg Gln Cys Glu Asp Leu Val Lys Leu Lys
                                    90
                85
Ile Arg Lys Asp Glu Asp Asn
            100
<210> 777
<211> 94
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
Ile Gln Thr Thr Gly Ala Val Ser Tyr Thr Val Glu Leu Lys Arg Tyr
                                     10
Gly Gly Pro Leu Gly Ile Thr Ile Ser Gly Thr Glu Glu Pro Phe Asp
                                 25
Pro Ile Val Ile Ser Gly Leu Thr Lys Arg Gly Leu Ala Glu Arg Thr
                            40
Gly Ala Ile His Val Gly Asp Arg Ile Leu Ala Ile Asn Asn Val Ser
                        55
Leu Lys Gly Arg Pro Leu Ser Glu Ala Ile His Leu Leu Gln Val Ala
Gly Glu Thr Val Thr Leu Lys Ile Lys Lys Gln Leu Asp Arg
<210> 778
<211> 105
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 778
Ile Leu Glu Met Glu Glu Leu Leu Pro Thr Pro Leu Glu Met His
Lys Val Thr Leu His Lys Asp Pro Met Arg His Asp Phe Gly Phe Ser
Val Ser Asp Gly Leu Leu Glu Lys Gly Val Tyr Val His Thr Val Arg
Pro Asp Gly Pro Ala His Arg Gly Gly Leu Gln Pro Phe Asp Arg Val
                                             60
Leu Gln Val Asn His Val Arg Thr Arg Asp Phe Asp Cys Cys Leu Ala
                    70
                                        75
Val Pro Leu Leu Ala Glu Ala Gly Asp Val Leu Glu Leu Ile Ile Ser
                85
                                    90
Arg Lys Pro His Thr Ala His Ser Ser
            100
                                105
```

<400> 776

```
<223> Synthetic polymer
<400> 779
Met Ala Leu Thr Val Asp Val Ala Gly Pro Ala Pro Trp Gly Phe Arg
                                    10
Ile Thr Gly Gly Arg Asp Phe His Thr Pro Ile Met Val Thr Lys Val
                                25
Ala Glu Arg Gly Lys Ala Lys Asp Ala Asp Leu Arg Pro Gly Asp Ile
                            40
Ile Val Ala Ile Asn Gly Glu Ser Ala Glu Gly Met Leu His Ala Glu
                        55
Ala Gln Ser Lys Ile Arg Gln Ser Pro Ser Pro Leu Arg Leu Gln Leu
Asp Arg Ser Gln Ala Thr Ser Pro Gly Gln Thr
<210> 780
<211> 84
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 780
Ser Asn Tyr Ser Val Ser Leu Val Gly Pro Ala Pro Trp Gly Phe Arg
                                    10
Leu Gln Gly Gly Lys Asp Phe Asn Met Pro Leu Thr Ile Ser Ser Leu
                                25
Lys Asp Gly Gly Lys Ala Ala Gln Ala Asn Val Arg Ile Gly Asp Val
                            40
Val Leu Ser Ile Asp Gly Ile Asn Ala Gln Gly Met Thr His Leu Glu
                        55
Ala Gln Asn Lys Ile Lys Gly Cys Thr Gly Ser Leu Asn Met Thr Leu
Gln Arg Ala Ser
<210> 781
<211> 133
<212> PRT
<213> Artificial Sequence
<223> Synthetic polymer
<400> 781
Thr Leu Val Glu His Ser Lys Leu Tyr Cys Gly His Cys Tyr Tyr Gln
                                    10
                -5
Thr Val Val Thr Pro Val Ile Glu Gln Ile Leu Pro Asp Ser Pro Gly
                                25
Ser His Leu Pro His Thr Val Thr Leu Val Ser Ile Pro Ala Ser Ser
       35
                            40
                                     194
```

<210> 779 <211> 91 <212> PRT

<220>.

His Gly Lys Arg Gly Leu Ser Val Ser Ile Asp Pro Pro His Gly Pro 55 Pro Gly Cys Gly Thr Glu His Ser His Thr Val Arg Val Gln Gly Val 70 75 Asp Pro Gly Cys Met Ser Pro Asp Val Lys Asn Ser Ile His Val Gly 90 85 Asp Arg Ile Leu Glu Ile Asn Gly Thr Pro Ile Arg Asn Val Pro Leu 105 Asp Glu Ile Asp Leu Leu Ile Gln Glu Thr Ser Arg Leu Leu Gln Leu 120 Thr Leu Glu His Asp 130 <210> 782 <211> 92 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer <400> 782 Pro Tyr Ser Val Thr Leu Ile Ser Met Pro Ala Thr Thr Glu Gly Arg 10 Arg Gly Phe Ser Val Ser Val Glu Ser Ala Cys Ser Asn Tyr Ala Thr 25 Thr Val Gln Val Lys Glu Val Asn Arg Met His Ile Ser Pro Asn Asn 40 Arg Asn Ala Ile His Pro Gly Asp Arg Ile Leu Glu Ile Asn Gly Thr ` 60 55 Pro Val Arg Thr Leu Arg Val Glu Glu Val Glu Asp Ala Ile Ser Gln 70 75 Thr Ser Gln Thr Leu Gln Leu Leu Ile Glu His Asp 85 <210> 783 <211> 82 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer <400> 783 Ile His Ser Val Thr Leu Arg Gly Pro Ser Pro Trp Gly Phe Arg Leu 5 10 Val Gly Arg Asp Phe Ser Ala Pro Leu Thr Ile Ser Arg Val His Ala 25 Gly Ser Lys Ala Ser Leu Ala Ala Leu Cys Pro Gly Asp Leu Ile Gln 45 40 Ala Ile Asn Gly Glu Ser Thr Glu Leu Met Thr His Leu Glu Ala Gln 55 Asn Arg Ile Lys Gly Cys His Asp His Leu Thr Leu Ser Val Ser Arg 70 65 Pro Glu

<210> 784 <211> 74 <212> PRT

```
<220>
<223> Synthetic polymer
<400> 784
Val Cys Tyr Arg Thr Asp Asp Glu Glu Asp Leu Gly Ile Tyr Val Gly
                 5
                                    10
Glu Val Asn Pro Asn Ser Ile Ala Ala Lys Asp Gly Arg Ile Arg Glu
                                25
Gly Asp Arg Ile Ile Gln Ile Asn Gly Val Asp Val Gln Asn Arg Glu
                            40
Glu Ala Val Ala Ile Leu Ser Gln Glu Glu Asn Thr Asn Ile Ser Leu
Leu Val Ala Arg Pro Glu Ser Gln Leu Ala
                    70
<210> 785
<211> 103
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 785
Ile Gln Lys Lys Asn His Trp Thr Ser Arg Val His Glu Cys Thr Val
Lys Arg Gly Pro Gln Gly Glu Leu Gly Val Thr Val Leu Gly Gly Ala
                                25
Glu His Gly Glu Phe Pro Tyr Val Gly Ala Val Ala Ala Val Glu Ala
Ala Gly Leu Pro Gly Gly Gly Glu Gly Pro Arg Leu Gly Glu Gly Glu
                        55
Leu Leu Glu Val Gln Gly Val Arg Val Ser Gly Leu Pro Arg Tyr
                    70
                                        75
Asp Val Leu Gly Val Ile Asp Ser Cys Lys Glu Ala Val Thr Phe Lys
                                   90
               85
Ala Val Arg Gln Gly Gly Arg
           100
<210> 786
<211> 104
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 786
Pro Ser Glu Leu Lys Gly Lys Phe Ile His Thr Lys Leu Arg Lys Ser
Ser Arg Gly Phe Gly Phe Thr Val Val Gly Gly Asp Glu Pro Asp Glu
Phe Leu Gln Ile Lys Ser Leu Val Leu Asp Gly Pro Ala Ala Leu Asp
                            40
Gly Lys Met Glu Thr Gly Asp Val Ile Val Ser Val Asn Asp Thr Cys
                        55
Val Leu Gly His Thr His Ala Gln Val Val Lys Ile Phe Gln Ser Ile
                    70
                                        75
Pro Ile Gly Ala Ser Val Asp Leu Glu Leu Cys Arg Gly Tyr Pro Leu
```

85

<210> 787

<211> 92 <212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic polymer

<400> 787

Pro Ala Thr Gln Pro Glu Leu Ile Thr Val His Ile Val Lys Gly Pro

1 5 10 15

Met Gly Phe Gly Phe Thr Ile Ala Asp Ser Pro Gly Gly Gly Gly Gln

Met Gly Phe Gly Phe Thr Ile Ala Asp Ser Pro Gly Gly Gly Gln 20 25 30

Arg Val Lys Gln Ile Val Asp Ser Pro Arg Cys Arg Gly Leu Lys Glu 35 40 45

Gly Asp Leu Ile Val Glu Val Asn Lys Lys Asn Val Gln Ala Leu Thr 50 55 60

His Asn Gln Val Val Asp Met Leu Val Glu Cys Pro Lys Gly Ser Glu 65 70 75 80

Val Thr Leu Leu Val Gln Arg Gly Gly Asn Leu Ser 85 90

<210> 788

<211> 102

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic polymer

<400> 788

Pro Asp Tyr Gln Glu Gln Asp Ile Phe Leu Trp Arg Lys Glu Thr Gly 1 5 10 15

Phe Gly Phe Arg Ile Leu Gly Gly Asn Glu Pro Gly Glu Pro Ile Tyr 20 25 30

Ile Gly His Ile Val Pro Leu Gly Ala Ala Asp Thr Asp Gly Arg Leu 35 40 45

Arg Ser Gly Asp Glu Leu Ile Cys Val Asp Gly Thr Pro Val Ile Gly 50 55 60

Lys Ser His Gln Leu Val Val Gln Leu Met Gln Gln Ala Ala Lys Gln 65 70 75 80

Gly His Val Asn Leu Thr Val Arg Arg Lys Val Val Phe Ala Val Pro 85 90 95

Lys Thr Glu Asn Ser Ser 100

<210> 789

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic polymer

<400> 789

Gly Val Val Ser Thr Val Val Gln Pro Tyr Asp Val Glu Ile Arg Arg

```
Gly Glu Asn Glu Gly Phe Gly Phe Val Ile Val Ser Ser Val Ser Arg
                                25
Pro Glu Ala Gly Thr Thr Phe Ala Gly Asn Ala Cys Val Ala Met Pro
His Lys Ile Gly Arg Ile Ile Glu Gly Ser Pro Ala Asp Arg Cys Gly
Lys Leu Lys Val Gly Asp Arg Ile Leu Ala Val Asn Gly Cys Ser Ile
Thr Asn Lys Ser His Ser Asp Ile Val Asn Leu Ile Lys Glu Ala Gly
                                   90
Asn Thr Val Thr Leu Arg Ile Ile Pro Gly Asp Glu Ser Ser Asn Ala
                                105
<210> 790
<211> 91
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 790
Gln Ala Thr Gln Glu Gln Asp Phe Tyr Thr Val Glu Leu Glu Arg Gly
Ala Lys Gly Phe Gly Phe Ser Leu Arg Gly Gly Arg Glu Tyr Asn Met
Asp Leu Tyr Val Leu Arg Leu Ala Glu Asp Gly Pro Ala Glu Arg Cys
                           40
Gly Lys Met Arg Ile Gly Asp Glu Ile Leu Glu Ile Asn Gly Glu Thr
                       55
                                            60
Thr Lys Asn Met Lys His Ser Arg Ala Ile Glu Leu Ile Lys Asn Gly
Gly Arg Arg Val Arg Leu Phe Leu Lys Arg Gly
<210> 791
<211> 100
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 791
Pro Ala Lys Met Glu Lys Glu Glu Thr Thr Arg Glu Leu Leu Pro
Asn Trp Gln Gly Ser Gly Ser His Gly Leu Thr Ile Ala Gln Arg Asp
Asp Gly Val Phe Val Gln Glu Val Thr Gln Asn Ser Pro Ala Ala Arg
Thr Gly Val Val Lys Glu Gly Asp Gln Ile Val Gly Ala Thr Ile Tyr
Phe Asp Asn Leu Gln Ser Gly Glu Val Thr Gln Leu Leu Asn Thr Met
                   70
Gly His His Thr Val Gly Leu Lys Leu His Arg Lys Gly Asp Arg Ser
                                    90
               85
Pro Asn Ser Ser
           100
```

```
<211> 97
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 792
Ser Glu Asn Cys Lys Val Phe Ile Glu Lys Gln Lys Gly Glu Ile Leu
Gly Val Val Ile Val Glu Ser Gly Trp Gly Ser Ile Leu Pro Thr Val
                                 25
Ile Ile Ala Asn Met Met His Gly Gly Pro Ala Glu Lys Ser Gly Lys
                            40
Leu Asn Ile Gly Asp Gln Ile Met Ser Ile Asn Gly Thr Ser Leu Val
                        55
Gly Leu Pro Leu Ser Thr Cys Gln Ser Ile Ile Lys Gly Leu Lys Asn
Gln Ser Arg Val Lys Leu Asn Ile Val Arg Cys Pro Pro Val Asn Ser
                85
                                    90
Ser
<210> 793
<211> 92
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 793
Leu Arg Cys Pro Pro Val Thr Thr Val Leu Ile Arg Arg Pro Asp Leu
Arg Tyr Gln Leu Gly Phe Ser Val Gln Asn Gly Ile Ile Cys Ser Leu
                                25
Met Arg Gly Gly Ile Ala Glu Arg Gly Gly Val Arg Val Gly His Arg
Ile Ile Glu Ile Asn Gly Gln Ser Val Val Ala Thr Pro His Glu Lys
                        55
Ile Val His Ile Leu Ser Asn Ala Val Gly Glu Ile His Met Lys Thr
Met Pro Ala Ala Met Tyr Arg Leu Leu Asn Ser Ser
                85
<210> 794
<211> 103
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 794
Leu Ser Asn Ser Asp Asn Cys Arg Glu Val His Leu Glu Lys Arg Arg
                                    10
Gly Glu Gly Leu Gly Val Ala Leu Val Glu Ser Gly Trp Gly Ser Leu
                                25
Leu Pro Thr Ala Val Ile Ala Asn Leu Leu His Gly Gly Pro Ala Glu
        35
                            40
```

<210> 792

```
Arg Ser Gly Ala Leu Ser Ile Gly Asp Arg Leu Thr Ala Ile Asn Gly
                        55
Thr Ser Leu Val Gly Leu Pro Leu Ala Ala Cys Gln Ala Ala Val Arg
                                        75
                    70
Glu Thr Lys Ser Gln Thr Ser Val Thr Leu Ser Ile Val His Cys Pro
                85
Pro Val Thr Thr Ala Ile Met
            100 .
<210> 795
<211> 92
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 795
Leu Val His Cys Pro Pro Val Thr Thr Ala Ile Ile His Arg Pro His
                                    10
Ala Arg Glu Gln Leu Gly Phe Cys Val Glu Asp Gly Ile Ile Cys Ser
                                25
Leu Leu Arg Gly Gly Ile Ala Glu Arg Gly Gly Ile Arg Val Gly His
Arg Ile Ile Glu Ile Asn Gly Gln Ser Val Val Ala Thr Pro His Ala
                        55
Arg Ile Ile Glu Leu Leu Thr Glu Ala Tyr Gly Glu Val His Ile Lys
                70
Thr Met Pro Ala Ala Thr Tyr Arg Leu Leu Thr Gly
               85
<210> 796
<211> 86
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 796
Arg Lys Val Arg Leu Ile Gln Phe Glu Lys Val Thr Glu Glu Pro Met
                                   10
Gly Ile Thr Leu Lys Leu Asn Glu Lys Gln Ser Cys Thr Val Ala Arg
                                25
           20
Ile Leu His Gly Gly Met Ile His Arg Gln Gly Ser Leu His Val Gly
                            40
Asp Glu Ile Leu Glu Ile Asn Gly Thr Asn Val Thr Asn His Ser Val
                        55
                                            60
Asp Gln Leu Gln Lys Ala Met Lys Glu Thr Lys Gly Met Ile Ser Leu
Lys Val Ile Pro Asn Gln
                85
<210> 797
<211> 89
<212> PRT
<213> Artificial Sequence
<220>
```

<223> Synthetic polymer

```
<400> 797
Pro Val Pro Pro Asp Ala Val Arg Met Val Gly Ile Arg Lys Thr Ala
                                    10
Gly Glu His Leu Gly Val Thr Phe Arg Val Glu Gly Gly Glu Leu Val
                                25
Ile Ala Arg Ile Leu His Gly Gly Met Val Ala Gln Gln Gly Leu Leu
His Val Gly Asp Ile Ile Lys Glu Val Asn Gly Gln Pro Val Gly Ser
                        55
Asp Pro Arg Ala Leu Gln Glu Leu Leu Arg Asn Ala Ser Gly Ser Val
Ile Leu Lys Ile Leu Pro Asn Tyr Gln
<210> 798
<211> 99
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 798
Gln Gly Arg His Val Glu Val Phe Glu Leu Leu Lys Pro Pro Ser Gly
                                    10
Gly Leu Gly Phe Ser Val Val Gly Leu Arg Ser Glu Asn Arg Gly Glu
                                25
Leu Gly Ile Phe Val Gln Glu Ile Gln Glu Gly Ser Val Ala His Arg
                            40
Asp Gly Arg Leu Lys Glu Thr Asp Gln Ile Leu Ala Ile Asn Gly Gln
                        55
Ala Leu Asp Gln Thr Ile Thr His Gln Gln Ala Ile Ser Ile Leu Gln
                   70
                                        75
Lys Ala Lys Asp Thr Val Gln Leu Val Ile Ala Arg Gly Ser Leu Pro
Gln Leu Val
<210> 799
<211> 97
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
Pro Val His Trp Gln His Met Glu Thr Ile Glu Leu Val Asn Asp Gly
Ser Gly Leu Gly Phe Gly Ile Ile Gly Gly Lys Ala Thr Gly Val Ile
                                25
Val Lys Thr Ile Leu Pro Gly Gly Val Ala Asp Gln His Gly Arg Leu
Cys Ser Gly Asp His Ile Leu Lys Ile Gly Asp Thr Asp Leu Ala Gly
Met Ser Ser Glu Gln Val Ala Gln Val Leu Arg Gln Cys Gly Asn Arg
                   70
                                        7.5
Val Lys Leu Met Ile Ala Arg Gly Ala Ile Glu Glu Arg Thr Ala Pro
                                    90
Thr
```

```
<210> 800
<211> 98
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 800
Gln Glu Ser Glu Thr Phe Asp Val Glu Leu Thr Lys Asn Val Gln Gly
Leu Gly Ile Thr Ile Ala Gly Tyr Ile Gly Asp Lys Leu Glu Pro
                                25
            20
Ser Gly Ile Phe Val Lys Ser Ile Thr Lys Ser Ser Ala Val Glu His
                            40
Asp Gly Arg Ile Gln Ile Gly Asp Gln Ile Ile Ala Val Asp Gly Thr
                        55
Asn Leu Gln Gly Phe Thr Asn Gln Gln Ala Val Glu Val Leu Arg His
Thr Gly Gln Thr Val Leu Leu Thr Leu Met Arg Arg Gly Met Lys Gln
                85
                                    90
Glu Ala
<210> 801
<211> 92
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 801
Leu Asn Tyr Glu Ile Val Val Ala His Val Ser Lys Phe Ser Glu Asn
                                    10
Ser Gly Leu Gly Ile Ser Leu Glu Ala Thr Val Gly His His Phe Ile
                                25
Arg Ser Val Leu Pro Glu Gly Pro Val Gly His Ser Gly Lys Leu Phe
                            40
Ser Gly Asp Glu Leu Leu Glu Val Asn Gly Ile Thr Leu Leu Gly Glu
                                            60
                        55
Asn His Gln Asp Val Val Asn Ile Leu Lys Glu Leu Pro Ile Glu Val
                    70
Thr Met Val Cys Cys Arg Arg Thr Val Pro Pro Thr
                85
<210> 802
<211> 100
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 802
Trp Glu Ala Gly Ile Gln His Ile Glu Leu Glu Lys Gly Ser Lys Gly
Leu Gly Phe Ser Ile Leu Asp Tyr Gln Asp Pro Ile Asp Pro Ala Ser
```

Thr Val Ile Ile Ile Arg Ser Leu Val Pro Gly Gly Ile Ala Glu Lys 40 Asp Gly Arg Leu Leu Pro Gly Asp Arg Leu Met Phe Val Asn Asp Val 55 Asn Leu Glu Asn Ser Ser Leu Glu Glu Ala Val Glu Ala Leu Lys Gly Ala Pro Ser Gly Thr Val Arg Ile Gly Val Ala Lys Pro Leu Pro Leu Ser Pro Glu Glu 100 <210> 803 <211> 99 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer <400> 803 Arg Asn Val Ser Lys Glu Ser Phe Glu Arg Thr Ile Asn Ile Ala Lys 10 Gly Asn Ser Ser Leu Gly Met Thr Val Ser Ala Asn Lys Asp Gly Leu Gly Met Ile Val Arg Ser Ile Ile His Gly Gly Ala Ile Ser Arg Asp 40 45 Gly Arg Ile Ala Ile Gly Asp Cys Ile Leu Ser Ile Asn Glu Glu Ser 55 Thr Ile Ser Val Thr Asn Ala Gln Ala Arg Ala Met Leu Arg Arg His 70 75 Ser Leu Ile Gly Pro Asp Ile Lys Ile Thr Tyr Val Pro Ala Glu His Leu Glu Glu <210> 804 <211> 112 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer <400> 804 Leu Asn Trp Asn Gln Pro Arg Arg Val Glu Leu Trp Arg Glu Pro Ser Lys Ser Leu Gly Ile Ser Ile Val Gly Gly Arg Gly Met Gly Ser Arg Leu Ser Asn Gly Glu Val Met Arg Gly Ile Phe Ile Lys His Val Leu 40 Glu Asp Ser Pro Ala Gly Lys Asn Gly Thr Leu Lys Pro Gly Asp Arg 55 Ile Val Glu Val Asp Gly Met Asp Leu Arg Asp Ala Ser His Glu Gln 70 75 Ala Val Glu Ala Ile Arg Lys Ala Gly Asn Pro Val Val Phe Met Val 90 8.5 Gln Ser Ile Ile Asn Arg Pro Arg Lys Ser Pro Leu Pro Ser Leu Leu 100 105

```
<212> PRT
<213> Artificial Sequence
<223> Synthetic polymer
<400> 805
Leu Thr Gly Glu Leu His Met Ile Glu Leu Glu Lys Gly His Ser Gly
                                    10
Leu Gly Leu Ser Leu Ala Gly Asn Lys Asp Arg Ser Arg Met Ser Val
                                25
Phe Ile Val Gly Ile Asp Pro Asn Gly Ala Ala Gly Lys Asp Gly Arg
                            40
Leu Gln Ile Ala Asp Glu Leu Leu Glu Ile Asn Gly Gln Ile Leu Tyr
                        55
                                             60
Gly Arg Ser His Gln Asn Ala Ser Ser Ile Ile Lys Cys Ala Pro Ser
                    70
                                        75
Lys Val Lys Ile Ile Phe Ile Arg Asn Lys Asp Ala Val Asn Gln
<210> 806
<211> 94
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 806
Leu Ser Ser Phe Lys Asn Val Gln His Leu Glu Leu Pro Lys Asp Gln
Gly Gly Leu Gly Ile Ala Ile Ser Glu Glu Asp Thr Leu Ser Gly Val
Ile Ile Lys Ser Leu Thr Glu His Gly Val Ala Ala Thr Asp Gly Arg
Leu Lys Val Gly Asp Gln Ile Leu Ala Val Asp Asp Glu Ile Val Val
                        55
Gly Tyr Pro Ile Glu Lys Phe Ile Ser Leu Leu Lys Thr Ala Lys Met
                    70
                                        75
Thr Val Lys Leu Thr Ile His Ala Glu Asn Pro Asp Ser Gln
<210> 807
<211> 95
<212> PRT
<213> Artificial Sequence
<223> Synthetic polymer
<400> 807
Leu Pro Gly Cys Glu Thr Thr Ile Glu Ile Ser Lys Gly Arg Thr Gly
                                    10
Leu Gly Leu Ser Ile Val Gly Gly Ser Asp Thr Leu Leu Gly Ala Ile
                                25
Ile Ile His Glu Val Tyr Glu Glu Gly Ala Ala Cys Lys Asp Gly Arg
                            40
Leu Trp Ala Gly Asp Gln Ile Leu Glu Val Asn Gly Ile Asp Leu Arg
   50
                        55
                                            60
```

<210> 805 <211> 95

```
Lys Ala Thr His Asp Glu Ala Ile Asn Val Leu Arg Gln Thr Pro Gln
                     70
                                         75
 Arg Val Arg Leu Thr Leu Tyr Arg Asp Glu Ala Pro Tyr Lys Glu
                                     90
 <210> 808
 <211> 98
 <212> PRT
 <213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 808
Lys Glu Glu Glu Val Cys Asp Thr Leu Thr Ile Glu Leu Gln Lys Lys
                                    . 10
Pro Gly Lys Gly Leu Gly Leu Ser Ile Val Gly Lys Arg Asn Asp Thr
Gly Val Phe Val Ser Asp Ile Val Lys Gly Gly Ile Ala Asp Ala Asp
Gly Arg Leu Met Gln Gly Asp Gln Ile Leu Met Val Asn Gly Glu Asp
                         55
Val Arg Asn Ala Thr Gln Glu Ala Val Ala Ala Leu Leu Lys Cys Ser
                     70
                                         75
Leu Gly Thr Val Thr Leu Glu Val Gly Arg Ile Lys Ala Gly Pro Phe
His Ser
<210> 809
<211> 96
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 809
Leu Gln Gly Leu Arg Thr Val Glu Met Lys Lys Gly Pro Thr Asp Ser
                                     10
Leu Gly Ile Ser Ile Ala Gly Gly Val Gly Ser Pro Leu Gly Asp Val
                                 25
Pro Ile Phe Ile Ala Met Met His Pro Thr Gly Val Ala Ala Gln Thr
                             40
Gln Lys Leu Arg Val Gly Asp Arg Ile Val Thr Ile Cys Gly Thr Ser
                         55
Thr Glu Gly Met Thr His Thr Gln Ala Val Asn Leu Leu Lys Asn Ala
                    70
Ser Gly Ser Ile Glu Met Gln Val Val Ala Gly Gly Asp Val Ser Val
<210> 810
<211> 91
<212> PRT
<213> Artificial Sequence
```

```
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 810
```

```
Leu Gly Pro Pro Gln Cys Lys Ser Ile Thr Leu Glu Arg Gly Pro Asp
                                    10
Gly Leu Gly Phe Ser Ile Val Gly Gly Tyr Gly Ser Pro His Gly Asp
                                25
Leu Pro Ile Tyr Val Lys Thr Val Phe Ala Lys Gly Ala Ala Ser Glu
Asp Gly Arg Leu Lys Arg Gly Asp Gln Ile Ile Ala Val Asn Gly Gln
                        55
Ser Leu Glu Gly Val Thr His Glu Glu Ala Val Ala Ile Leu Lys Arg
                   70
Thr Lys Gly Thr Val Thr Leu Met Val Leu Ser
<210> 811
<211> 93
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 811
Ile Gln Tyr Glu Glu Ile Val Leu Glu Arg Gly Asn Ser Gly Leu Gly
Phe Ser Ile Ala Gly Gly Ile Asp Asn Pro His Val Pro Asp Asp Pro
Gly Ile Phe Ile Thr Lys Ile Ile Pro Gly Gly Ala Ala Ala Met Asp
                            40
Gly Arg Leu Gly Val Asn Asp Cys Val Leu Arg Val Asn Glu Val Glu
                        55
                                            60
Val Ser Glu Val Val His Ser Arg Ala Val Glu Ala Leu Lys Glu Ala
                   70
                                        75
Gly Pro Val Val Arg Leu Val Val Arg Arg Gln Asn
                8.5
<210> 812
<211> 90
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 812
Ile Thr Leu Leu Lys Gly Pro Lys Gly Leu Gly Phe Ser Ile Ala Gly
                                    10
Gly Ile Gly Asn Gln His Ile Pro Gly Asp Asn Ser Ile Tyr Ile Thr
                                25
Lys Ile Ile Glu Gly Gly Ala Ala Gln Lys Asp Gly Arg Leu Gln Ile
                            40
Gly Asp Arg Leu Leu Ala Val Asn Asn Thr Asn Leu Gln Asp Val Arg
                        55
His Glu Glu Ala Val Ala Ser Leu Lys Asn Thr Ser Asp Met Val Tyr
Leu Lys Val Ala Lys Pro Gly Ser Leu Glu
                8.5
```

<210> 813 <211> 119 <212> PRT

```
<220>
<223> Synthetic polymer
<400> 813
Ile Leu Leu His Lys Gly Ser Thr Gly Leu Gly Phe Asn Ile Val Gly
                                    10
Gly Glu Asp Gly Glu Gly Ile Phe Val Ser Phe Ile Leu Ala Gly Gly
                                25
            20
Pro Ala Asp Leu Ser Gly Glu Leu Arg Arg Gly Asp Arg Ile Leu Ser
Val Asn Gly Val Asn Leu Arg Asn Ala Thr His Glu Gln Ala Ala Ala
                        55
Ala Leu Lys Arg Ala Gly Gln Ser Val Thr Ile Val Ala Gln Tyr Arg
                    70
                                        75
Pro Glu Glu Tyr Ser Arg Phe Glu Ser Lys Ile His Asp Leu Arg Glu
                85
                                    90
Gln Met Met Asn Ser Ser Met Ser Ser Gly Ser Gly Ser Leu Arg Thr
                               105
Ser Glu Lys Arg Ser Leu Glu
        115
<210> 814
<211> 111
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 814
Cys Val Glu Arg Leu Glu Leu Phe Pro Val Glu Leu Glu Lys Asp Ser
                                    10
Glu Gly Leu Gly Ile Ser Ile Ile Gly Met Gly Ala Gly Ala Asp Met
                                25
Gly Leu Glu Lys Leu Gly Ile Phe Val Lys Thr Val Thr Glu Gly Gly
                            40
Ala Ala His Arg Asp Gly Arg Ile Gln Val Asn Asp Leu Leu Val Glu
Val Asp Gly Thr Ser Leu Val Gly Val Thr Gln Ser Phe Ala Ala Ser
                    70
                                        75
Val Leu Arg Asn Thr Lys Gly Arg Val Arg Phe Met Ile Gly Arg Glu
               85
                                    90
Arg Pro Gly Glu Gln Ser Glu Val Ala Gln Arg Ile His Arg Asp
<210> 815
<211> 90
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 815
Ile Gln Pro Asn Val Ile Ser Val Arg Leu Phe Lys Arg Lys Val Gly
                5
Gly Leu Gly Phe Leu Val Lys Glu Arg Val Ser Lys Pro Pro Val Ile
Ile Ser Asp Leu Ile Arg Gly Gly Ala Ala Glu Gln Ser Gly Leu Ile
```

```
40
        35
Gln Ala Gly Asp Ile Ile Leu Ala Val Asn Gly Arg Pro Leu Val Asp
                        55
                                            60
Leu Ser Tyr Asp Ser Ala Leu Glu Val Leu Arg Gly Ile Ala Ser Glu
                    70
Thr His Val Val Leu Ile Leu Arg Gly Pro
                85
<210> 816
<211> 107
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 816
Gln Ala Asn Ser Asp Glu Ser Asp Ile Ile His Ser Val Arg Val Glu
                                    10
Lys Ser Pro Ala Gly Arg Leu Gly Phe Ser Val Arg Gly Gly Ser Glu
His Gly Leu Gly Ile Phe Val Ser Lys Val Glu Glu Gly Ser Ser Ala
                            40
                                                4.5
Glu Arg Ala Gly Leu Cys Val Gly Asp Lys Ile Thr Glu Val Asn Gly
Leu Ser Leu Glu Ser Thr Thr Met Gly Ser Ala Val Lys Val Leu Thr
                    70
                                        75
Ser Ser Ser Arg Leu His Met Wet Val Arg Arg Met Gly Arg Val Pro
               85
Gly Ile Lys Phe Ser Lys Glu Lys Asn Ser Ser
<210> 817
<211> 106
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 817
Pro Ser Asp Thr Ser Ser Glu Asp Gly Val Arg Arg Ile Val His Leu
Tyr Thr Thr Ser Asp Asp Phe Cys Leu Gly Phe Asn I-le Arg Gly Gly
                                25
Lys Glu Phe Gly Leu Gly Ile Tyr Val Ser Lys Val Asp His Gly Gly
                            40
Leu Ala Glu Glu Asn Gly Ile Lys Val Gly Asp Gln Val Leu Ala Ala
Asn Gly Val Arg Phe Asp Asp Ile Ser His Ser Gln Ala Val Glu Val
                    70
                                        75
Leu Lys Gly Gln Thr His Ile Met Leu Thr Ile Lys Glu Thr Gly Arg
                                    90
Tyr Pro Ala Tyr Lys Glu Met Asn Ser Ser
            100
<210> 818
<211> 115
<212> PRT
```

```
<220>
<223> Synthetic polymer
<400> 818
Lys Ile Lys Lys Phe Leu Thr Glu Ser His Asp Arg Gln Ala Lys Gly
Lys Ala Ile Thr Lys Lys Tyr Ile Gly Ile Arg Met Met Ser Leu
                                25
Thr Ser Ser Lys Ala Lys Glu Leu Lys Asp Arg His Arg Asp Phe Pro
Asp Val Ile Ser Gly Ala Tyr Ile Ile Glu Val Ile Pro Asp Thr Pro
                        55
                                            60
Ala Glu Ala Gly Gly Leu Lys Glu Asn Asp Val Ile Ile Ser Ile Asn
                    70
                                        75
Gly Gln Ser Val Val Ser Ala Asn Asp Val Ser Asp Val Ile Lys Arg
                85
                                    90
Glu Ser Thr Leu Asn Met Val Val Arg Arg Gly Asn Glu Asp Ile Met
                                105
Ile Thr Val
        115
<210> 819
<211> 100
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 819
Pro Asp Gly Glu Ile Thr Ser Ile Lys Ile Asn Arg Val Asp Pro Ser
                                    10
Glu Ser Leu Ser Ile Arg Leu Val Gly Gly Ser Glu Thr Pro Leu Val
His Ile Ile Ile Gln His Ile Tyr Arg Asp Gly Val Ile Ala Arg Asp
                            40
Gly Arg Leu Leu Pro Gly Asp Ile Ile Leu Lys Val Asn Gly Met Asp
Ile Ser Asn Val Pro His Asn Tyr Ala Val Arg Leu Leu Arg Gln Pro
Cys Gln Val Leu Trp Leu Thr Val Met Arg Glu Gln Lys Phe Arg Ser
Arg Asn Ser Ser
           100
<210> 820
<211> 101
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 820
His Arg Pro Arg Asp Asp Ser Phe His Val Ile Leu Asn Lys Ser Ser
Pro Glu Glu Gln Leu Gly Ile Lys Leu Val Arg Lys Val Asp Glu Pro
                                25
Gly Val Phe Ile Phe Asn Val Leu Asp Gly Gly Val Ala Tyr Arg His
                            40
```

Gly Gln Leu Glu Glu Asn Asp Arg Val Leu Ala Ile Asn Gly His Asp 50 55 60

Leu Arg Tyr Gly Ser Pro Glu Ser Ala Ala His Leu Ile Gln Ala Ser 70 75 80

Glu Arg Arg Val His Leu Val Val Ser Arg Gln Val Arg Gln Arg Ser 85 90 95

Pro Glu Asn Ser Ser 100

<210> 821
<211> 104
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer

<210> 822 <211> 99 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer

100

<210> 823 <211> 101 <212> PRT

```
<220>
<223> Synthetic polymer
<400> 823
Leu Leu Thr Glu Glu Glu Ile Asn Leu Thr Arg Gly Pro Ser Gly Leu
                5
                                    10
Gly Phe Asn Ile Val Gly Gly Thr Asp Gln Gln Tyr Val Ser Asn Asp
                                25
Ser Gly Ile Tyr Val Ser Arg Ile Lys Glu Asn Gly Ala Ala Ala Leu
                            40
Asp Gly Arg Leu Gln Glu Gly Asp Lys Ile Leu Ser Val Asn Gly Gln
Asp Leu Lys Asn Leu Leu His Gln Asp Ala Val Asp Leu Phe Arg Asn
                   7.0
                                        75
Ala Gly Tyr Ala Val Ser Leu Arg Val Gln His Arg Leu Gln Val Gln
                                   90
Asn Gly Ile His Ser
            100
<210> 824
<211> 94
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 824
Pro Val Asp Ala Ile Arg Ile Leu Gly Ile His Lys Arg Ala Gly Glu
Pro Leu Gly Val Thr Phe Arg Val Glu Asn Asn Asp Leu Val Ile Ala
Arg Ile Leu His Gly Gly Met Ile Asp Arg Gln Gly Leu Leu His Val
Gly Asp Ile Ile Lys Glu Val Asn Gly His Glu Val Gly Asn Asn Pro
                        55
Lys Glu Leu Gln Glu Leu Lys Asn Ile Ser Gly Ser Val Thr Leu
Lys Ile Leu Pro Ser Tyr Arg Asp Thr Ile Thr Pro Gln Gln
<210> 825
<211> 93
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 825
Asp Asp Met Val Lys Leu Val Glu Val Pro Asn Asp Gly Gly Pro Leu
                                    10
Gly Ile His Val Val Pro Phe Ser Ala Arg Gly Gly Arg Thr Leu Gly
Leu Leu Val Lys Arg Leu Glu Lys Gly Gly Lys Ala Glu His Glu Asn
                            40
Leu Phe Arg Glu Asn Asp Cys Ile Val Arg Ile Asn Asp Gly Asp Leu
                     · 55
Arg Asn Arg Arg Phe Glu Gln Ala Gln His Met Phe Arg Gln Ala Met
```

```
80
                    70
Arg Thr Pro Ile Ile Trp Phe His Val Val Pro Ala Ala
                85
<210> 826
<211> 94
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 826
Gly Lys Arg Leu Asn Ile Gln Leu Lys Lys Gly Thr Glu Gly Leu Gly
                                    10
Phe Ser Ile Thr Ser Arg Asp Val Thr Ile Gly Gly Ser Ala Pro Ile
                                25
Tyr Val Lys Asn Ile Leu Pro Arg Gly Ala Ala Ile Gln Asp Gly Arg
        35
                            40
Leu Lys Ala Gly Asp Arg Leu Ile Glu Val Asn Gly Val Asp Leu Val
Gly Lys Ser Gln Glu Glu Val Val Ser Leu Leu Arg Ser Thr Lys Met
            . 70
                                        75
Glu Gly Thr Val Ser Leu Leu Val Phe Arg Gln Glu Asp Ala
<210> 827
<211> 103
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
Thr Pro Asp Gly Thr Arg Glu Phe Leu Thr Phe Glu Val Pro Leu Asn
                                    10
Asp Ser Gly Ser Ala Gly Leu Gly Val Ser Val Lys Gly Asn Arg Ser
Lys Glu Asn His Ala Asp Leu Gly Ile Phe Val Lys Ser Ile Ile Asn
                            40
Gly Gly Ala Ala Ser Lys Asp Gly Arg Leu Arg Val Asn Asp Gln Leu
                        55
Ile Ala Val Asn Gly Glu Ser Leu Leu Gly Lys Thr Asn Gln Asp Ala
                   70
                                        75
Met Glu Thr Leu Arg Arg Ser Met Ser Thr Glu Gly Asn Lys Arg Gly
                85
Met Ile Gln Leu Ile Val Ala
            100
<210> 828
<211> 102
<212> PRT
<213> Artificial Sequence
<220>
```

<223> Synthetic polymer

<400> 828

Leu Pro Glu Thr His Arg Arg Val Arg Leu His Lys His Gly Ser Asp

```
10
Arg Pro Leu Gly Phe Tyr Ile Arg Asp Gly Met Ser Val Arg Val Ala
            20
                                 25
Pro Gln Gly Leu Glu Arg Val Pro Gly Ile Phe Ile Ser Arg Leu Val
                            40
Arg Gly Gly Leu Ala Glu Ser Thr Gly Leu Leu Ala Val Ser Asp Glu
                        55
Ile Leu Glu Val Asn Gly Ile Glu Val Ala Gly Lys Thr Leu Asp Gln
                    70
Val Thr Asp Met Met Val Ala Asn Ser His Asn Leu Ile Val Thr Val
                85
Lys Pro Ala Asn Gln Arq
<210> 829
<211> 111
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 829
Ile Asp Val Asp Leu Val Pro Glu Thr His Arg Arg Val Arg Leu His
Arg His Gly Cys Glu Lys Pro Leu Gly Phe Tyr Ile Arg Asp Gly Ala
                                25
Ser Val Arg Val Thr Pro His Gly Leu Glu Lys Val Pro Gly Ile Phe
                            40
Ile Ser Arg Met Val Pro Gly Gly Leu Ala Glu Ser Thr Gly Leu Leu
                        55
Ala Val Asn Asp Glu Val Leu Glu Val Asn Gly Ile Glu Val Ala Gly
                                        75
Lys Thr Leu Asp Gln 'Val Thr Asp Met Met Ile Ala Asn Ser His Asn
                85
                                    90
Leu Ile Val Thr Val Lys Pro Ala Asn Gln Arg Asn Asn Val Val
                                105
<210> 830
<211> 100
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 830
Arg Ser Arg Lys Leu Lys Glu Val Arg Leu Asp Arg Leu His Pro Glu
Gly Leu Gly Leu Ser Val Arg Gly Gly Leu Glu Phe Gly Cys Gly Leu
                                2.5
Phe Ile Ser His Leu Ile Lys Gly Gly Gln Ala Asp Ser Val Gly Leu
                            40
Gln Val Gly Asp Glu Ile Val Arg Ile Asn Gly Tyr Ser Ile Ser Ser
                        55
Cys Thr His Glu Glu Val Ile Asn Leu Ile Arg Thr Lys Lys Thr Val
                    70
                                        75
Ser Ile Lys Val Arg His Ile Gly Leu Ile Pro Val Lys Ser Ser Pro
Asp Glu Phe His
            100
```

```
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
Ile Pro Gly Asn Arg Glu Asn Lys Glu Lys Lys Val Phe Ile Ser Leu
                                    10
Val Gly Ser Arg Gly Leu Gly Cys Ser Ile Ser Ser Gly Pro Ile Gln
                                25
Lys Pro Gly Ile Phe Ile Ser His Val Lys Pro Gly Ser Leu Ser Ala
                            40
Glu Val Gly Leu Glu Ile Gly Asp Gln Ile Val Glu Val Asn Gly Val
Asp Phe Ser Asn Leu Asp His Lys Glu Ala Val Asn Val Leu Lys Ser
                    70
                                        75
Ser Arg Ser Leu Thr Ile Ser Ile Val Ala Ala Ala Gly Arg Glu Leu
Phe Met Thr Asp Glu Phe
            100
<210> 832
<211> 103
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 832
Pro Glu Gln Ile Met Gly Lys Asp Val Arg Leu Leu Arg Ile Lys Lys
                                    10
Glu Gly Ser Leu Asp Leu Ala Leu Glu Gly Gly Val Asp Ser Pro Ile
                                25
Gly Lys Val Val Val Ser Ala Val Tyr Glu Arg Gly Ala Ala Glu Arg
                            40
His Gly Gly Ile Val Lys Gly Asp Glu Ile Met Ala Ile Asn Gly Lys
                        55
Ile Val Thr Asp Tyr Thr Leu Ala Glu Ala Asp Ala Ala Leu Gln Lys
                    70
                                        75
Ala Trp Asn Gln Gly Gly Asp Trp Ile Asp Leu Val Val Ala Val Cys
                                   90
Pro Pro Lys Glu Tyr Asp Asp
           100
<210> 833
<211> 103
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 833
Leu Thr Ser Thr Phe Asn Pro Arg Glu Cys Lys Leu Ser Lys Gln Glu
                                    10
                                     214
```

<210> 831 <211> 102

<210> 834

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic polymer

<400> 834

Arg Leu Cys Tyr Leu Val Lys Glu Gly Gly Ser Tyr Gly Phe Ser Leu 1 5 10 15

Lys Thr Val Gln Gly Lys Lys Gly Val Tyr Met Thr Asp Ile Thr Pro 20 25 30

Gln Gly Val Ala Met Arg Ala Gly Val Leu Ala Asp Asp His Leu Ile 35 40 45

Glu Val Asn Gly Glu Asn Val Glu Asp Ala Ser His Glu Glu Val Val 50

Glu Lys Val Lys Lys Ser Gly Ser Arg Val Met Phe Leu Leu Val Asp

65 70 75
Lys Glu Thr Asp Lys Arg Glu Phe Ile Val Thr Asp

<210> 835

<211> 112

<212> PRT

<213> Artificial Sequence

85

<220>

<223> Synthetic polymer

<400> 835

Gln Phe Lys Arg Glu Thr Ala Ser Leu Lys Leu Pro His Gln Pro
1 5 10 15

Arg Ile Val Glu Met Lys Lys Gly Ser Asn Gly Tyr Gly Phe Tyr Leu 20 25 30

Arg Ala Gly Ser Glu Gln Lys Gly Gln Ile Ile Lys Asp Ile Asp Ser 35 40 45

Gly Ser Pro Ala Glu Glu Ala Gly Leu Lys Asn Asn Asp Leu Val Val 50 55 60

Ala Val Asn Gly Glu Ser Val Glu Thr Leu Asp His Asp Ser Val Val 65 70 75 80

Glu Met Ile Arg Lys Gly Gly Asp Gln Thr Ser Leu Leu Val Val Asp 85 90 95

Lys Glu Thr Asp Asn Met Tyr Arg Leu Ala Glu Phe Ile Val Thr Asp 100 105 110

```
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 836
Pro Asp Thr Thr Glu Glu Val Asp His Lys Pro Lys Leu Cys Arg Leu
                                     10
Ala Lys Gly Glu Asn Gly Tyr Gly Phe His Leu Asn Ala Ile Arg Gly
                                 25
Leu Pro Gly Ser Phe Ile Lys Glu Val Gln Lys Gly Gly Pro Ala Asp
                             40
Leu Ala Gly Leu Glu Asp Glu Asp Val Ile Ile Glu Val Asn Gly Val
                        55
Asn Val Leu Asp Glu Pro Tyr Glu Lys Val Val Asp Arg Ile Gln Ser
                    70
                                        75
Ser Gly Lys Asn Val Thr Leu Leu Val Glx Gly Lys Asn Ser Ser
                85
                                     90
<210> 837
<211> 89
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 837
Pro Thr Val Pro Gly Lys Val Thr Leu Gln Lys Asp Ala Gln Asn Leu
Ile Gly Ile Ser Ile Gly Gly Gly Ala Gln Tyr Cys Pro Cys Leu Tyr
            20
                                25
Ile Val Gln Val Phe Asp Asn Thr Pro Ala Ala Leu Asp Gly Thr Val
Ala Ala Gly Asp Glu Ile Thr Gly Val Asn Gly Arg Ser Ile Lys Gly
                        55
Lys Thr Lys Val Glu Val Ala Lys Met Ile Gln Glu Val Lys Gly Glu
                    70
Val Thr Ile His Tyr Asn Lys Leu Gln
                85
<210> 838
<211> 98
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 838
Ser Gln Gly Val Gly Pro Ile Arg Lys Val Leu Leu Leu Lys Glu Asp
                                    10
His Glu Gly Leu Gly Ile Ser Ile Thr Gly Gly Lys Glu His Gly Val
                                25
Pro Ile Leu Ile Ser Glu Ile His Pro Gly Gln Pro Ala Asp Arg Cys
                            40
Gly Gly Leu His Val Gly Asp Ala Ile Leu Ala Val Asn Gly Val Asn
Leu Arg Asp Thr Lys His Lys Glu Ala Val Thr Ile Leu Ser Gln Gln
```

<211> 95

```
70
                                        75
Arg Gly Glu Ile Glu Phe Glu Val Val Tyr Val Ala Pro Glu Val Asp
                85
                                     90
Ser Asp
<210> 839
<211> 97
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 839
Ile His Val Thr Ile Leu His Lys Glu Glu Gly Ala Gly Leu Gly Phe
                                    10
Ser Leu Ala Gly Gly Ala Asp Leu Glu Asn Lys Val Ile Thr Val His
                                25
Arg Val Phe Pro Asn Gly Leu Ala Ser Gln Glu Gly Thr Ile Gln Lys
                            40
Gly Asn Glu Val Leu Ser Ile Asn Gly Lys Ser Leu Lys Gly Thr Thr
                        55
His His Asp Ala Leu Ala Ile Leu Arg Gln Ala Arg Glu Pro Arg Gln
                   70
                                        75
Ala Val Ile Val Thr Arg Lys Leu Thr Pro Glu Glu Phe Ile Val Thr
                                    90
Asp
<210> 840
<211> 98
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 840
Thr Ala Glu Ala Thr Val Cys Thr Val Thr Leu Glu Lys Met Ser Ala
                                    10
Gly Leu Gly Phe Ser Leu Glu Gly Gly Lys Gly Ser Leu His Gly Asp
                                25
Lys Pro Leu Thr Ile Asn Arg Ile Phe Lys Gly Ala Ala Ser Glu Gln
                            40
Ser Glu Thr Val Gln Pro Gly Asp Glu Ile Leu Gln Leu Gly Gly Thr
Ala Met Gln Gly Leu Thr Arg Phe Glu Ala Trp Asn Ile Ile Lys Ala
                                        75
Leu Pro Asp Gly Pro Val Thr Ile Val Ile Arg Arg Lys Ser Leu Gln
Ser Lys
<210> 841
<211> 98
<212> PRT
<213> Artificial Sequence
```

<220>

```
<211> 105
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 842
His Val Met Arg Arg Lys Pro Pro Ala Glu Lys Val Met Glu Ile Lys
                                    10
Leu Ile Lys Gly Pro Lys Gly Leu Gly Phe Ser Ile Ala Gly Gly Val
                                25
Gly Asn Gln His Ile Pro Gly Asp Asn Ser Ile Tyr Val Thr Lys Ile
Ile Glu Gly Gly Ala Ala His Lys Asp Gly Arg Leu Gln Ile Gly Asp
Lys Ile Leu Ala Val Asn Ser Val Gly Leu Glu Asp Val Met His Glu
                    70
                                        75
Asp Ala Val Ala Ala Leu Lys Asn Thr Tyr Asp Val Val Tyr Leu Lys
Val Ala Lys Pro Ser Asn Ala Tyr Leu
            100
```

<210> 843 <211> 97 <212> PRT <213> Artificial Sequence <220> <223> Synthetic polymer

<210> 842

```
90
Asp
<210> 844
<211> 88
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 844
Leu Ile Arg Ile Thr Pro Asp Glu Asp Gly Lys Phe Gly Phe Asn Leu
                                    10
Lys Gly Gly Val Asp Gln Lys Met Pro Leu Val Val Ser Arg Ile Asn
            20
Pro Glu Ser Pro Ala Asp Thr Cys Ile Pro Lys Leu Asn Glu Gly Asp
                            40
Gln Ile Val Leu Ile Asn Gly Arg Asp Ile Ser Glu His Thr His Asp
Gln Val Val Met Phe Ile Lys Ala Ser Arg Glu Ser His Ser Arg Glu
                   70
                                        75
Leu Ala Leu Val Ile Arg Arg Arg
                85
<210> 845
<211> 88
<212> PRT
<213> Artificial Sequence
<223> Synthetic polymer
<400> 845
Ile Arg Met Lys Pro Asp Glu Asn Gly Arg Phe Gly Phe Asn Val Lys
                                    1.0
Gly Gly Tyr Asp Gln Lys Met Pro Val Ile Val Ser Arg Val Ala Pro
                                25
Gly Thr Pro Ala Asp Leu Cys Val Pro Arg Leu Asn Glu Gly Asp Gln
                            40
Val Val Leu Ile Asn Gly Arg Asp Ile Ala Glu His Thr His Asp Gln
                        5.5
                                             60
Val Val Leu Phe Ile Lys Ala Ser Cys Glu Arg His Ser Gly Glu Leu
                   70
                                        75
Met Leu Leu Val Arg Pro Asn Ala
                85
<210> 846
<211> 106
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 846
Pro Glu Arg Glu Ile Thr Leu Val Asn Leu Lys Lys Asp Ala Lys Tyr
                                    10
                 5.
                                     219
```

Gln Thr Val Thr Ile Ile Ala Gln Tyr Lys Pro Glu Phe Ile Val Thr

```
Gly Leu Gly Phe Gln Ile Ile Gly Gly Glu Lys Met Gly Arg Leu Asp
Leu Gly Ile Phe Ile Ser Ser Val Ala Pro Gly Gly Pro Ala Asp Phe
                            40
His Gly Cys Leu Lys Pro Gly Asp Arg Leu Ile Ser Val Asn Ser Val
                        55
Ser Leu Glu Gly Val Ser His His Ala Ala Ile Glu Ile Leu Gln Asn
                    70
                                        75
Ala Pro Glu Asp Val Thr Leu Val Ile Ser Gln Pro Lys Glu Lys Ile
                85
Ser Lys Val Pro Ser Thr Pro Val His Leu
            100
<210> 847
<211> 95
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 847
Gly Asp Ile Phe Glu Val Glu Leu Ala Lys Asn Asp Asn Ser Leu Gly
                                   10
Ile Ser Val Thr Gly Gly Val Asn Thr Ser Val Arg His Gly Gly Ile
Tyr Val Lys Ala Val Ile Pro Gln Gly Ala Ala Glu Ser Asp Gly Arg
                            40
Ile His Lys Gly Asp Arg Val Leu Ala Val Asn Gly Val Ser Leu Glu
                        55
Gly Ala Thr His Lys Gln Ala Val Glu Thr Leu Arg Asn Thr Gly Gln
                   70
                                       75
Val Val His Leu Leu Glu Lys Gly Gln Ser Pro Thr Ser Lys
                85
                                    90
<210> 848
<211> 104
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 848
Thr Glu Glu Asn Thr Phe Glu Val Lys Leu Phe Lys Asn Ser Ser Gly
Leu Gly Phe Ser Phe Ser Arg Glu Asp Asn Leu Ile Pro Glu Gln Ile
Asn Ala Ser Ile Val Arg Val Lys Leu Phe Ala Gly Gln Pro Ala
Ala Glu Ser Gly Lys Ile Asp Val Gly Asp Val Ile Leu Lys Val Asn
Gly Ala Ser Leu Lys Gly Leu Ser Gln Gln Glu Val Ile Ser Ala Leu
                   70
                                       75
Arg Gly Thr Ala Pro Glu Val Phe Leu Leu Cys Arg Pro Pro Pro
               85
Gly Val Leu Pro Glu Ile Asp Thr
```

```
<220>
   <223> Synthetic polymer
<400> 849
 Glu Leu Glu Val Glu Leu Leu Ile Thr Leu Ile Lys Ser Glu Lys Ala
                                       10
                   - 5
   Ser Leu Gly Phe Thr Val Thr Lys Gly Asn Gln Arg Ile Gly Cys Tyr
   Val His Asp Val Ile Gln Asp Pro Ala Lys Ser Asp Gly Arg Leu Lys
                               40
   Pro Gly Asp Arg Leu Ile Lys Val Asn Asp Thr Asp Val Thr Asn Met
                           55
                                               60
   Thr His Thr Asp Ala Val Asn Leu Leu Arg Ala Ala Ser Lys Thr Val
                      7.0
                                           75
   Arg Leu Val Ile Gly Arg Val Leu Glu Leu Pro Arg Ile Pro Met Leu
                                       90
   Pro His
   <210> 850
   <211> 94
   <212> PRT
   <213> Artificial Sequence
  <223> Synthetic polymer
  <400> 850
  Met Leu Pro His Leu Leu Pro Asp Ile Thr Leu Thr Cys Asn Lys Glu
  Glu Leu Gly Phe Ser Leu Cys Gly Gly His Asp Ser Leu Tyr Gln Val
                                   25
  Val Tyr Ile Ser Asp Ile Asn Pro Arg Ser Val Ala Ala Ile Glu Gly
                               40
  Asn Leu Gln Leu Leu Asp Val Ile His Tyr Val Asn Gly Val Ser Thr
                          55
                                               60
  Gln Gly Met Thr Leu Glu Glu Val Asn Arg Ala Leu Asp Met Ser Leu
                      70
                                           75
  Pro Ser Leu Val Leu Lys Ala Thr Arg Asn Asp Leu Pro Val
  <210> 851
  <211> 93
  <212> PRT
  <213> Artificial Sequence
  <220>
  <223> Synthetic polymer
  <400> 851
  Arg Pro Ser Pro Pro Arg Val Arg Ser Val Glu Val Ala Arg Gly Arg
                                       10
  Ala Gly Tyr Gly Phe Thr Leu Ser Gly Gln Ala Pro Cys Val Leu Ser
              20
                                   25
  Cys Val Met Arg Gly Ser Pro Ala Asp Phe Val Gly Leu Arg Ala Gly
  Asp Gln Ile Leu Ala Val Asn Glu Ile Asn Val Lys Lys Ala Ser His
                                       221
```

<211> 98 <212> PRT

<213> Artificial Sequence

```
55
Glu Asp Val Val Lys Leu Ile Gly Lys Cys Ser Gly Val Leu His Met
                                        75
                    70
Val Ile Ala Glu Gly Val Gly Arg Phe Glu Ser Cys Ser
                85
<210> 852
<211> 96
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 852
Leu Cys Ser Glu Arg Arg Tyr Arg Gln Ile Thr Ile Pro Arg Gly Lys
                5
                                    10
Asp Gly Phe Gly Phe Thr Ile Cys Cys Asp Ser Pro Val Arg Val Gln
                                25
Ala Val Asp Ser Gly Gly Pro Ala Glu Arg Ala Gly Leu Gln Gln Leu
Asp Thr Val Leu Gln Leu Asn Glu Arg Pro Val Glu His Trp Lys Cys
                        55
Val Glu Leu Ala His Glu Ile Arg Ser Cys Pro Ser Glu Ile Ile Leu
                    70
Leu Val Trp Arg Met Val Pro Gln Val Lys Pro Gly Ile His Arg Asp
                                    90
<210> 853
<211> 104
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 853
Ile Ser Phe Ser Ala Asn Lys Arg Trp Thr Pro Pro Arg Ser Ile Arg
                                    10
Phe Thr Ala Glu Glu Gly Asp Leu Gly Phe Thr Leu Arg Gly Asn Ala
            20
                                25
Pro Val Gln Val His Phe Leu Asp Pro Tyr Cys Ser Ala Ser Val Ala
                            40
                                                45
Gly Ala Arg Glu Gly Asp Tyr Ile Val Ser Ile Gln Leu Val Asp Cys
                       55
Lys Trp Leu Thr Leu Ser Glu Val Met Lys Leu Leu Lys Ser Phe Gly
65
                    70
                                        75
Glu Asp Glu Ile Glu Met Lys Val Val Ser Leu Leu Asp Ser Thr Ser
Ser Met His Asn Lys Ser Ala Thr
           100
<210> 854
<211> 109
<212> PRT
<213> Artificial Sequence
<220>
```

<223> Synthetic polymer

```
Arg Gly Glu Lys Lys Asn Ser Ser Gly Ile Ser Gly Ser Gln Arg
                                    10
Arg Tyr Ile Gly Val Met Met Leu Thr Leu Ser Pro Ser Ile Leu Ala
                                25
Glu Leu Gln Leu Arg Glu Pro Ser Phe Pro Asp Val Gln His Gly Val
Leu Ile His Lys Val Ile Leu Gly Ser Pro Ala His Arg Ala Gly Leu
Arg Pro Gly Asp Val Ile Leu Ala Ile Gly Glu Gln Met Val Gln Asn
                    70
                                        75
Ala Glu Asp Val Tyr Glu Ala Val Arg Thr Gln Ser Gln Leu Ala Val
                                    90
Gln Ile Arg Arg Gly Arg Glu Thr Leu Thr Leu Tyr Val
            100
<210> 855
<211> 111
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 855
Glu Glu Lys Thr Val Val Leu Gln Lys Lys Asp Asn Glu Gly Phe Gly
Phe Val Leu Arg Gly Ala Lys Ala Asp Thr Pro Ile Glu Glu Phe Thr
Pro Thr Pro Ala Phe Pro Ala Leu Gln Tyr Leu Glu Ser Val Asp Glu
                            40
Gly Gly Val Ala Trp Gln Ala Gly Leu Arg Thr Gly Asp Phe Leu Ile
Glu Val Asn Asn Glu Asn Val Val Lys Val Gly His Arg Gln Val Val
Asn Met Ile Arg Gln Gly Gly Asn His Leu Val Leu Lys Val Val Thr
                                    90
Val Thr Arg Asn Leu Asp Pro Asp Asp Thr Ala Arg Lys Lys Ala
                                105
<210> 856
<211> 110
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 856
Ser Asp Tyr Val Ile Asp Asp Lys Val Ala Val Leu Gln Lys Arg Asp
His Glu Gly Phe Gly Phe Val Leu Arg Gly Ala Lys Ala Glu Thr Pro
Ile Glu Glu Phe Thr Pro Thr Pro Ala Phe Pro Ala Leu Gln Tyr Leu
                            40
Glu Ser Val Asp Val Glu Gly Val Ala Trp Arg Ala Gly Leu Arg Thr
                        5.5
                                            60
Gly Asp Phe Leu Ile Glu Val Asn Gly Val Asn Val Val Lys Val Gly
                   70
                                        75
His Lys Gln Val Val Ala Leu Ile Arg Gln Gly Gly Asn Arg Leu Val
                85
                                    90
```

<400> 854

```
105
<210> 857
<211> 91
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 857
Ile Tyr Leu Glu Ala Phe Leu Glu Gly Gly Ala Pro Trp Gly Phe Thr
                                    10
Leu Lys Gly Gly Leu Glu His Gly Glu Pro Leu Ile Ile Ser Lys Val
            20
                                25
Glu Glu Gly Gly Lys Ala Asp Thr Leu Ser Ser Lys Leu Gln Ala Gly
                            40
Asp Glu Val Val His Ile Asn Glu Val Thr Leu Ser Ser Ser Arg Lys
                        55
Glu Ala Val Ser Leu Val Lys Gly Ser Tyr Lys Thr Leu Arg Leu Val
                    70
                                        75
Val Arg Arg Asp Val Cys Thr Asp Pro Gly His
<210> 858
<211> 83
<212> PRT
<213> Artificial Sequence
<223> Synthetic polymer
<400> 858
Ile Arg Leu Cys Arg Leu Val Arg Gly Glu Gln Gly Tyr Gly Phe His
                                    1.0
Leu His Gly Glu Lys Gly Arg Arg Gly Gln Phe Ile Arg Arg Val Glu
Pro Gly Ser Pro Ala Glu Ala Ala Ala Leu Arg Ala Gly Asp Arg Leu
                            40
Val Glu Val Asn Gly Val Asn Val Glu Gly Glu Thr His His Gln Val
                                             60
                        55
Val Gln Arg Ile Lys Ala Val Glu Gly Gln Thr Arg Leu Leu Val Val
                   70
                                        75
Asp Gln Asn
<210> 859
<211> 84
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 859
Ile Arg His Leu Arg Lys Gly Pro Gln Gly Tyr Gly Phe Asn Leu His
Ser Asp Lys Ser Arg Pro Gly Gln Tyr Ile Arg Ser Val Asp Pro Gly
           20
                                25
                                                     30
```

Met Lys Val Val Ser Val Thr Arg Lys Pro Glu Glu Asp Gly

```
Ser Pro Ala Ala Arg Ser Gly Leu Arg Ala Gln Asp Arg Leu Ile Glu
Val Asn Gly Gln Asn Val Glu Gly Leu Arg His Ala Glu Val Val Ala
                        55
                                            60
Ser Ile Lys Ala Arg Glu Asp Glu Ala Arg Leu Leu Val Val Asp Pro
Glu Thr Asp Glu
<210> 860
<211> 92
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 860
Pro Gly Val Arg Glu Ile His Leu Cys Lys Asp Glu Arg Gly Lys Thr
                                    10
Gly Leu Arg Leu Arg Lys Val Asp Gln Gly Leu Phe Val Gln Leu Val
Gln Ala Asn Thr Pro Ala Ser Leu Val Gly Leu Arg Phe Gly Asp Gln
Leu Leu Gln Ile Asp Gly Arg Asp Cys Ala Gly Trp Ser Ser His Lys
Ala His Gln Val Val Lys Lys Ala Ser Gly Asp Lys Ile Val Val Val
                    70
Val Arg Asp Arg Pro Phe Gln Arg Thr Val Thr Met
                85
<210> 861
<211> 90
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 861
Pro Phe Gln Arg Thr Val Thr Met His Lys Asp Ser Met Gly His Val
Gly Phe Val Ile Lys Lys Gly Lys Ile Val Ser Leu Val Lys Gly Ser
           20
                                2.5
Ser Ala Ala Arg Asn Gly Leu Leu Thr Asn His Tyr Val Cys Glu Val
Asp Gly Gln Asn Val Ile Gly Leu Lys Asp Lys Lys Ile Met Glu Ile
                        55
                                             60
Leu Ala Thr Ala Gly Asn Val Val Thr Leu Thr Ile Ile Pro Ser Val
                    70
                                        75
Ile Tyr Glu His Ile Val Glu Phe Ile Val
                85
<210> 862
<211> 109
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
```

```
<400> 862
Leu Lys Glu Lys Thr Val Leu Leu Gln Lys Lys Asp Ser Glu Gly Phe
Gly Phe Val Leu Arg Gly Ala Lys Ala Gln Thr Pro Ile Glu Glu Phe
                                25
Thr Pro Thr Pro Ala Phe Pro Ala Leu Gln Tyr Leu Glu Ser Val Asp
                            40
Glu Gly Gly Val Ala Trp Arg Ala Gly Leu Arg Met Gly Asp Phe Leu
Ile Glu Val Asn Gly Gln Asn Val Val Lys Val Gly His Arg Gln Val
                                       75
Val Asn Met Ile Arg Gln Gly Gly Asn Thr Leu Met Val Lys Val Val
                                   90
Met Val Thr Arg His Pro Asp Met Asp Glu Ala Val Gln
           100
                              105
<210> 863
<211> 88
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 863
Leu Glu Ile Lys Gln Gly Ile Arg Glu Val Ile Leu Cys Lys Asp Gln
                                   10
Asp Gly Lys Ile Gly Leu Arg Leu Lys Ser Ile Asp Asn Gly Ile Phe
                               25
Val Gln Leu Val Gln Ala Asn Ser Pro Ala Ser Leu Val Gly Leu Arg
Phe Gly Asp Gln Val Leu Gln Ile Asn Gly Glu Asn Cys Ala Gly Trp
                       55
Ser Ser Asp Lys Ala His Lys Val Leu Lys Gln Ala Phe Gly Glu Lys
                                        75
Ile Thr Met Arg Ile His Arg Asp
               85
<210> 864
<211> 75
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 864
Arg Asp Arg Pro Phe Glu Arg Thr Ile Thr Met His Lys Asp Ser Thr
Gly His Val Gly Phe Ile Phe Lys Asn Gly Lys Ile Thr Ser Ile Val
                               2.5
Lys Asp Ser Ser Ala Ala Arg Asn Gly Leu Leu Thr Glu His Asn Ile
                           40
Cys Glu Ile Asn Gly Gln Asn Val Ile Gly Leu Lys Asp Ser Gln Ile
                       55
```

Ala Asp Ile Leu Ser Thr Ser Gly Asn Ser Ser

```
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 865
Gln Arg Arg Arg Val Thr Val Arg Lys Ala Asp Ala Gly Gly Leu Gly
Ile Ser Ile Lys Gly Gly Arq Glu Asn Lys Met Pro Ile Leu Ile Ser
Lys Ile Phe Lys Gly Leu Ala Ala Asp Gln Thr Glu Ala Leu Phe Val
                             40
Gly Asp Ala Ile Leu Ser Val Asn Gly Glu Asp Leu Ser Ser Ala Thr
                        55
His Asp Glu Ala Val Gln Val Leu Lys Lys Thr Gly Lys Glu Val Val
                    70
                                         75
Leu Glu Val Lys Tyr Met Lys Asp Val Ser Pro Tyr Phe Lys
                85
<210> 866
<211> 89
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 866
Ile Arg Val Val Lys Gln Glu Ala Gly Gly Leu Gly Ile Ser Ile Lys
                                    10
Gly Gly Arg Glu Asn Arg Met Pro Ile Leu Ile Ser Lys Ile Phe Pro
Gly Leu Ala Ala Asp Gln Ser Arg Ala Leu Arg Leu Gly Asp Ala Ile
                            40
Leu Ser Val Asn Gly Thr Asp Leu Arg Gln Ala Thr His Asp Gln Ala
                        55
                                         . 60
Val Gln Ala Leu Lys Arg Ala Gly Lys Glu Val Leu Leu Glu Val Lys
                    70
                                        75
Phe Ile Arg Glu Phe Ile Val Thr Asp
                85
<210> 867
<211> 101
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 867
Glu Pro Phe Tyr Ser Gly Glu Arg Thr Val Thr Ile Arg Arg Gln Thr
                                    10
Val Gly Gly Phe Gly Leu Ser Ile Lys Gly Gly Ala Glu His Asn Ile
            20
                                25
Pro Val Val Ser Lys Ile Ser Lys Glu Gln Arg Ala Glu Leu Ser
                            40
Gly Leu Leu Phe Ile Gly Asp Ala Ile Leu Gln Ile Asn Gly Ile Asn
                        55
Val Arg Lys Cys Arg His Glu Glu Val Val Gln Val Leu Arg Asn Ala
```

<211> 94

```
65
                   70
Gly Glu Glu Val Thr Leu Thr Val Ser Phe Leu Lys Arg Ala Pro Ala
                                  90
              85
Phe Leu Lys Leu Pro
           100
<210> 868
<211> 99
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 868
Ser His Gln Gly Arg Asn Arg Arg Thr Val Thr Leu Arg Arg Gln Pro
Val Gly Gly Leu Gly Leu Ser Ile Lys Gly Gly Ser Glu His Asn Val
                                25
Pro Val Val Ile Ser Lys Ile Phe Glu Asp Gln Ala Ala Asp Gln Thr
Gly Met Leu Phe Val Gly Asp Ala Val Leu Gln Val Asn Gly Ile His
                       55
Val Glu Asn Ala Thr His Glu Glu Val Val His Leu Leu Arg Asn Ala
                   70
                                       75
Gly Asp Glu Val Thr Ile Thr Val Glu Tyr Leu Arg Glu Ala Pro Ala
Phe Leu Lys
<210> 869
<211> 91
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 869
Arg Gly Glu Thr Lys Glu Val Glu Val Thr Lys Thr Glu Asp Ala Leu
                                    10
Gly Leu Thr Ile Thr Asp Asn Gly Ala Gly Tyr Ala Phe Ile Lys Arg
                                25
Ile Lys Glu Gly Ser Ile Ile Asn Arg Ile Glu Ala Val Cys Val Gly
                                                45
                           40
Asp Ser Ile Glu Ala Ile Asn Asp His Ser Ile Val Gly Cys Arg His
Tyr Glu Val Ala Lys Met Leu Arg Glu Leu Pro Lys Ser Gln Pro Phe
Thr Leu Arg Leu Val Gln Pro Lys Arg Ala Phe
               85
<210> 870
<211> 88
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
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<400> 870
His Ser Ile His Ile Glu Lys Ser Asp Thr Ala Ala Asp Thr Tyr Gly
                                    10
Phe Ser Leu Ser Ser Val Glu Glu Asp Gly Ile Arg Arg Leu Tyr Val
Asn Ser Val Lys Glu Thr Gly Leu Ala Ser Lys Lys Gly Leu Lys Ala
Gly Asp Glu Ile Leu Glu Ile Asn Asn Arg Ala Ala Asp Ala Leu Asn
Ser Ser Met Leu Lys Asp Phe Leu Ser Gln Pro Ser Leu Gly Leu Leu
Val Arg Thr Tyr Pro Glu Leu Glu
                85
<210> 871
<211> 97
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 871
Pro Leu Asn Val Tyr Asp Val Gln Leu Thr Lys Thr Gly Ser Val Cys
Asp Phe Gly Phe Ala Val Thr Ala Gln Val Asp Glu Arg Gln His Leu
                                25
Ser Arg Ile Phe Ile Ser Asp Val Leu Pro Asp Gly Leu Ala Tyr Gly
                            40
Glu Gly Leu Arg Lys Gly Asn Glu Ile Met Thr Leu Asn Gly Glu Ala
                        55
Val Ser Asp Leu Asp Leu Lys Gln Met Glu Ala Leu Phe Ser Glu Lys
                                        75
Ser Val Gly Leu Thr Leu Ile Ala Arg Pro Pro Asp Thr Lys Ala Thr
Leu
<210> 872
<211> 103
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 872
Gln Arg Val Glu Ile His Lys Leu Arg Gln Gly Glu Asn Leu Ile Leu
Gly Phe Ser Ile Gly Gly Gly Ile Asp Gln Asp Pro Ser Gln Asn Pro
Phe Ser Glu Asp Lys Thr Asp Lys Gly Ile Tyr Val Thr Arg Val Ser
Glu Gly Gly Pro Ala Glu Ile Ala Gly Leu Gln Ile Gly Asp Lys Ile
Met Gln Val Asn Gly Trp Asp Met Thr Met Val Thr His Asp Gln Ala
                    70
Arg Lys Arg Leu Thr Lys Arg Ser Glu Glu Val Val Arg Leu Leu Val
               85
Thr Arg Gln Ser Leu Gln Lys
```

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<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 873
Arg Lys Glu Val Glu Val Phe Lys Ser Glu Asp Ala Leu Gly Leu Thr
                                     10
Ile Thr Asp Asn Gly Ala Gly Tyr Ala Phe Ile Lys Arg Ile Lys Glu
                                 25
Gly Ser Val Ile Asp His Ile His Leu Ile Ser Val Gly Asp Met Ile
                            40
                                                 4.5
Glu Ala Ile Asn Gly Gln Ser Leu Leu Gly Cys Arg His Tyr Glu Val
                        55
Ala Arg Leu Leu Lys Glu Leu Pro Arg Gly Arg Thr Phe Thr Leu Lys
Leu Thr Glu Pro Arg Lys
                85
<210> 874
<211> 91
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 874
His Ser His Pro Arg Val Val Glu Leu Pro Lys Thr Asp Glu Gly Leu
Gly Phe Asn Val Met Gly Gly Lys Glu Gln Asn Ser Pro Ile Tyr Ile
                                25
Ser Arg Ile Ile Pro Gly Gly Val Ala Glu Arg His Gly Gly Leu Lys
                            40
Arg Gly Asp Gln Leu Leu Ser Val Asn Gly Val Ser Val Glu Gly Glu
His His Glu Lys Ala Val Glu Leu Leu Lys Ala Ala Lys Asp Ser Val
                    70
Lys Leu Val Val Arg Tyr Thr Pro Lys Val Leu
                85
<210> 875
<211> 96
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 875
Ile Ser Asn Gln Lys Arg Gly Val Lys Val Leu Lys Gln Glu Leu Gly
                                    10
Gly Leu Gly Ile Ser Ile Lys Gly Gly Lys Glu Asn Lys Met Pro Ile
                                25
Leu Ile Ser Lys Ile Phe Lys Gly Leu Ala Ala Asp Gln Thr Gln Ala
       35
                            40
                                                 45 .
```

<210> 873 <211> 86 <212> PRT

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Leu Tyr Val Gly Asp Ala Ile Leu Ser Val Asn Gly Ala Asp Leu Arg
                        55
Asp Ala Thr His Asp Glu Ala Val Gln Ala Leu Lys Arg Ala Gly Lys
                    70
                                        75
Glu Val Leu Leu Glu Val Lys Tyr Met Arg Glu Ala Thr Pro Tyr Val
<210> 876
<211> 110
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 876
Ile His Phe Ser Asn Ser Glu Asn Cys Lys Glu Leu Gln Leu Glu Lys
His Lys Gly Glu Ile Leu Gly Val Val Val Glu Ser Gly Trp Gly
                                25
            20
Ser Ile Leu Pro Thr Val Ile Leu Ala Asn Met Met Asn Gly Gly Pro
                            40
Ala Ala Arg Ser Gly Lys Leu Ser Ile Gly Asp Gln Ile Met Ser Ile
                        55
Asn Gly Thr Ser Leu Val Gly Leu Pro Leu Ala Thr Cys Gln Gly Ile
Ile Lys Gly Leu Lys Asn Gln Thr Gln Val Lys Leu Asn Ile Val Ser
                                    90
Cys Pro Pro Val Thr Thr Val Leu Ile Lys Arg Asn Ser Ser
            100
                                105
<210> 877
<211> 94
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 877
Ile Pro Pro Val Thr Thr Val Leu Ile Lys Arg Pro Asp Leu Lys Tyr
                                    10
Gln Leu Gly Phe Ser Val Gln Asn Gly Ile Ile Cys Ser Leu Met Arg
            20
                                25
Gly Gly Ile Ala Glu Arg Gly Gly Val Arg Val Gly His Arg Ile Ile
                            40
Glu Ile Asn Gly Gln Ser Val Val Ala Thr Ala His Glu Lys Ile Val
                        55
Gln Ala Leu Ser Asn Ser Val Gly Glu Ile His Met Lys Thr Met Pro
                    70
                                        75
Ala Ala Met Phe Arg Leu Leu Thr Gly Gln Glu Asn Ser Ser
               85
<210> 878
<211> 101
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
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<400> 878
Ile Trp Glu Gln His Thr Val Thr Leu His Arg Ala Pro Gly Phe Gly
                                    10
Phe Gly Ile Ala Ile Ser Gly Gly Arg Asp Asn Pro His Phe Gln Ser
                                25
Gly Glu Thr Ser Ile Val Ile Ser Asp Val Leu Lys Gly Gly Pro Ala
Glu Gly Gln Leu Gln Glu Asn Asp Arg Val Ala Met Val Asn Gly Val
                        55
Ser Met Asp Asn Val Glu His Ala Phe Ala Val Gln Gln Leu Arg Lys
Ser Gly Lys Asn Ala Lys Ile Thr Ile Arg Arg Lys Lys Val Gln
Ile Pro Asn Ser Ser
            100
<210> 879
<211> 95
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 879
Ile Ser Ser Gln Pro Ala Lys Pro Thr Lys Val Thr Leu Val Lys Ser
                                   10
Arg Lys Asn Glu Glu Tyr Gly Leu Arg Leu Ala Ser His Ile Phe Val
                                25
Lys Glu Ile Ser Gln Asp Ser Leu Ala Ala Arg Asp Gly Asn Ile Gln
                           40
Glu Gly Asp Val Val Leu Lys Ile Asn Gly Thr Val Thr Glu Asn Met
                        55
Ser Leu Thr Asp Ala Lys Thr Leu Ile Glu Arg Ser Lys Gly Lys Leu
                    70
                                        75
Lys Met Val Val Gln Arg Asp Arg Ala Thr Leu Leu Asn Ser Ser
<210> 880
<211> 90
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 880
Ile Arg Met Lys Leu Val Lys Phe Arg Lys Gly Asp Ser Val Gly Leu
Arg Leu Ala Gly Gly Asn Asp Val Gly Ile Phe Val Ala Gly Val Leu
                                25
Glu Asp Ser Pro Ala Ala Lys Glu Gly Leu Glu Gly Asp Gln Ile
                           4.0
Leu Arg Val Asn Asn Val Asp Phe Thr Asn Ile Ile Arg Glu Glu Ala
Val Leu Phe Leu Leu Asp Leu Pro Lys Gly Glu Glu Val Thr Ile Leu
                   70
Ala Gln Lys Lys Asp Val Phe Ser Asn
```

```
<211> 96
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 881
Leu Ile Trp Glu Gln Tyr Thr Val Thr Leu Gln Lys Asp Ser Lys Arg
                                    10
Gly Phe Gly Ile Ala Val Ser Gly Gly Arg Asp Asn Pro His Phe Glu
Asn Gly Glu Thr Ser Ile Val Ile Ser Asp Val Leu Pro Gly Gly Pro
                            40
Ala Asp Gly Leu Leu Gln Glu Asn Asp Arg Val Val Met Val Asn Gly
                        55
                                            60
Thr Pro Met Glu Asp Val Leu His Ser Phe Ala Val Gln Gln Leu Arg
                    70
                                        75
Lys Ser Gly Lys Val Ala Ala Ile Val Val Lys Arg Pro Arg Lys Val
                                    90
                85
<210> 882
<211> 79
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 882
Arg Val Leu Leu Met Lys Ser Arg Ala Asn Glu Glu Tyr Gly Leu Arg
                                    10
Leu Gly Ser Gln Ile Phe Val Lys Glu Met Thr Arg Thr Gly Leu Ala
Thr Lys Asp Gly Asn Leu His Glu Gly Asp Ile Ile Leu Lys Ile Asn
                            40
Gly Thr Val Thr Glu Asn Met Ser Leu Thr Asp Ala Arg Lys Leu Ile
                       55
Glu Lys Ser Arg Gly Lys Leu Gln Leu Val Val Leu Arg Asp Ser
                    70
<210> 883
<211> 90
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic polymer
<400> 883
His Ala Pro Asn Thr Lys Met Val Arg Phe Lys Lys Gly Asp Ser Val
                                    10
Gly Leu Arg Leu Ala Gly Gly Asn Asp Val Gly Ile Phe Val Ala Gly
Ile Gln Glu Gly Thr Ser Ala Glu Gln Glu Gly Leu Gln Glu Gly Asp
                            40
Gln Ile Leu Lys Val Asn Thr Gln Asp Phe Arg Gly Leu Val Arg Glu
Asp Ala Val Leu Tyr Leu Leu Glu Ile Pro Lys Gly Glu Met Val Thr
```

<210> 881

```
65 70 75 80
```

Ile Leu Ala Gln Ser Arg Ala Asp Val Tyr 85 90

<210> 884

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic polymer

<400> 884

Ile Pro Gly Asn Ser Thr Ile Trp Glu Gln His Thr Ala Thr Leu Ser 1 5 10 15

Lys Asp Pro Arg Arg Gly Phe Gly Ile Ala Ile Ser Gly Gly Arg Asp
20 25 30

Arg Pro Gly Gly Ser Met Val Val Ser Asp Val Val Pro Gly Gly Pro 35 40 45

Ala Glu Gly Arg Leu Gln Thr Gly Asp His Ile Val Met Val Asn Gly 50 55 60

Val Ser Met Glu Asn Ala Thr Ser Ala Phe Ala Ile Gln Ile Leu Lys 70 75 80

Thr Cys Thr Lys Met Ala Asn Ile Thr Val Lys Arg Pro Arg Arg Ile 85 90 95

His Leu Pro Ala Glu Phe Ile Val Thr Asp 100 105

<210> 885

<211> 98

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic polymer

<400> 885

Gln Asp Val Gln Met Lys Pro Val Lys Ser Val Leu Val Lys Arg Arg

1 10 15

Asp Ser Glu Glu Phe Gly Val Lys Leu Gly Ser Gln Ile Phe Ile Lys

His Ile Thr Asp Ser Gly Leu Ala Ala Arg His Arg Gly Leu Gln Glu 35 40 45

Gly Asp Leu Ile Leu Gln Ile Asn Gly Val Ser Ser Gln Asn Leu Ser 50 55 60

Leu Asn Asp Thr Arg Arg Leu Ile Glu Lys Ser Glu Gly Lys Leu Ser 65 70 75 80

Leu Leu Val Leu Arg Asp Arg Gly Gln Phe Leu Val Asn Ile Pro Asn 85 90 95

Ser Ser

<210> 886

<211> 104

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic polymer

<400> 886 Arg Gly Tyr Ser Pro Asp Thr Arg Val Val Arg Phe Leu Lys Gly Lys 10 Ser Ile Gly Leu Arg Leu Ala Gly Gly Asn Asp Val Gly Ile Phe Val 25 Ser Gly Val Gln Ala Gly Ser Pro Ala Asp Gly Gln Gly Ile Gln Glu 40 Gly Asp Gln Ile Leu Gln Val Asn Asp Val Pro Phe Gln Asn Leu Thr 55 Arg Glu Glu Ala Val Gln Phe Leu Leu Gly Leu Pro Pro Gly Glu Glu 75 70 Met Glu Leu Val Thr Gln Arg Lys Gln Asp Ile Phe Trp Lys Met Val 90 85 Gln Ser Glu Phe Ile Val Thr Asp 100